CALIFORNIA
OIL WORLD
and Petroleum Industry

TULSA PUBLIC LIBRARY
TECHNICAL DEPARTMENT
TULSA, OKLA.

Tulsa Public Library
Technical Dept.
Tulsa, Okla.
171

AN OPEN LETTER TO:

SEP 19 1940

SEP 16 1940

BAKER OIL TOOLS, INC.

BAKER OIL TOOLS, INC. SERVING THE WORLD

MAIL ADDRESS: POST OFFICE BOX 127 VERNON STATION

CABLE ADDRESS "BACASO"
MAIN OFFICE AND FACTORY
6000 SO. BOYLE AVENUE

LOS ANGELES, CALIF.

TULSA PUBLIC LIBRARY
TECHNICAL DEPARTMENT
TULSA, OKLA.

It is generally agreed that the proper landing and cementing of casing is one of the most important steps in drilling a modern oil well.

But exactly what does the term "cementing" mean? It used to be that to many operators "cementing" meant merely pumping the desired amount of slurry down the casing and discharging it through practically any type of Shoe on the end of the string . . . hoping enough cement would be placed around the Shoe and behind the pipe to get a shut-off and reenforce the casing. Later, when the Shoe was drilled out and the job tested, if it was found dry, the cementing operation was considered a complete success.

But times have changed, and so has the modern operator's conception of what a "good" cement job not only "is" but "must be." Today a cement job must stand TWO tests . . . one the water Shut-off Test . . . and the other the test of time, for with proration and other factors restricting and regulating oil production, it is becoming increasingly important that the normal producing life of an oil well not only be maintained but actually prolonged if the initial investment, to say nothing of anticipated profits, are to be recovered.

This long range, profit-return program calls for a consideration of all factors which influence the life expectancy of an oil well . . . which goes right back to "cementing," for the effectiveness of the cement job performed determines to a considerable extent the length of time that an oil well will be a profitable producer.

Baker Oil Tools, too, has recognized this fact and has accordingly made available to the oil industry a type of Shoe that field records have proved to be the most efficient unit for Guiding, Floating and Cementing casing that has yet been devised. It is called the Baker Cement Wash-Down Whirler Float Shoe (see illustration). This type of Shoe is designed to afford results that not only insure the safe landing of casing strings but also the best possible chance for a successful cement job under all conditions . . . the type of job that has the best chance to stand up for the normal life of an oil well.

If you have not investigated Baker Cement Wash-Down Whirler Float Shoes it will pay you to do so.

Yours very truly,

BAKER OIL TOOLS, INC.
General Manager

Baker Cement Wash Down Whirler Float Shoe

PAGES 223-225 OF THE BAKER SECTION OF THE 1940 COMPOSITE CATALOG

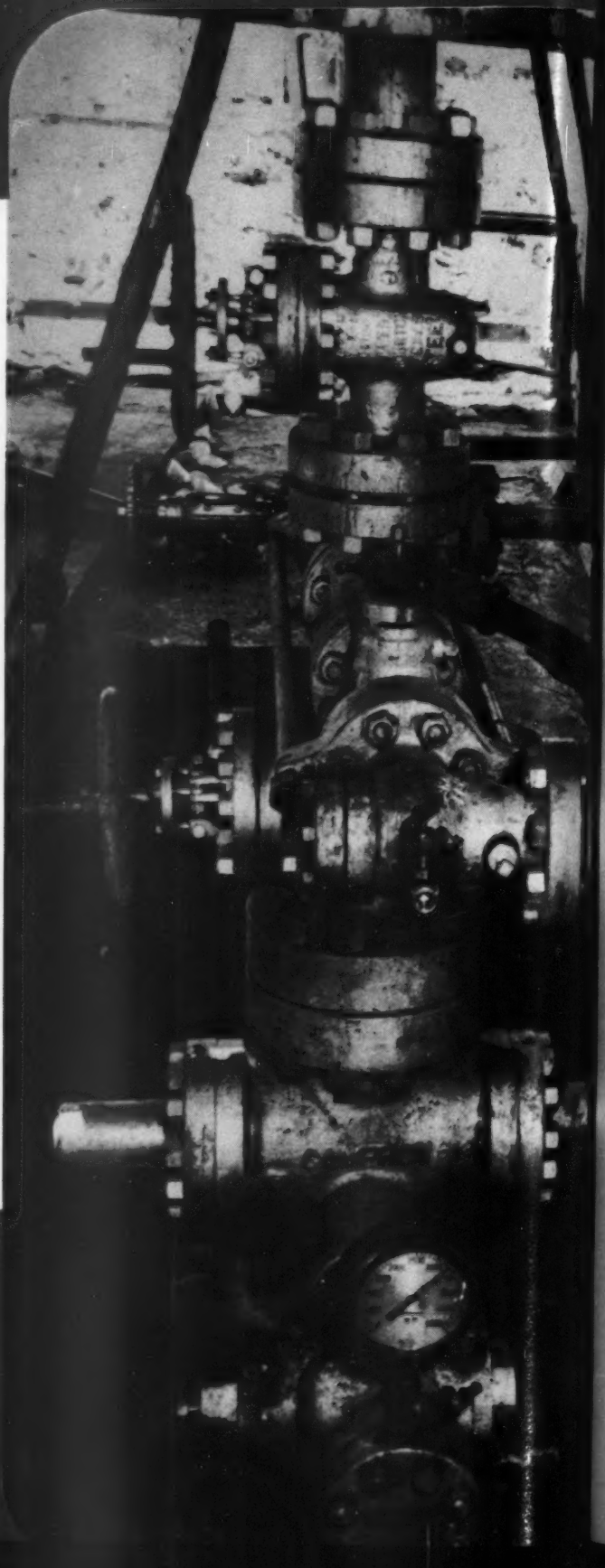
Vol. 33
No. 17

Whole
No. 1568

CAMERON SAFETY COMPLETION EQUIPMENT

ON CALIFORNIA'S HIGHEST PRESSURE WELL

CASING PRESSURE.....3350 LBS.
TUBING FLOW PRESSURE..3150 LBS.
Western Gulf Oil Corporation
KCL-A74-B, PALOMA FIELDS, JULY 4, 1940



Western Gulf's recent discovery at Paloma, which opened California's highest pressure field to date, was protected at every step of the completion operation by Cameron Safety Completion Equipment.

A Cameron 10,000-lb. Test, Type "LD" Ram-type Tubing Control Head provides the foundation for the Christmas tree manifold on this unusual well. (See photograph at right).

The Cameron Type "LD" Ram-type Tubing Control Head employs many features of the famous Cameron Drilling Control Units. Its rams, which are fitted with self-feeding packing, are utilized to both seal and suspend the tubing string. Should the well attempt to blow out at any time during completion operations, the rams provide the ultimate in safe, dependable control. It obviates the need of a cement retainer when making a squeeze cement job, and is extremely practical on any re-working subsequent to original completion of the well. In fields where slip suspension of tubing is desired to facilitate setting a formation packer, the Tubing Control Head can be furnished with slip suspension in the top flange, in which case the rams are utilized as an annular space master gate and outlets are provided above the rams.

Interested operators are invited to write for complete details on the Cameron Type "LD" Ram-type Tubing Control Head which costs little, if any, more than a conventional "set-screw" type tubing head.

CAMERON
IRON WORKS, INC.

111 BERRY ST. HOUSTON, TEXAS

Exclusive Distributor, Howard Supply Co., Los Angeles
Export: 74 Trinity Place, New York, N. Y.

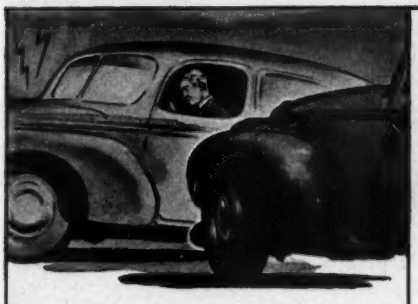
Poor gasoline performance is a common cause of

TRAFFIC NERVES

Why put up with it?

POOR PICK-UP

When your motor fails you in a tight spot — on the highway, or in traffic — the nervous shock may send your pulse as high as 50% above normal. This was proved in scientific tests. NEW 76 gasoline will help you avoid these shocks because it is rich enough in power fractions to whip you out of tight spots when danger threatens.



STALLING AND BUCKING

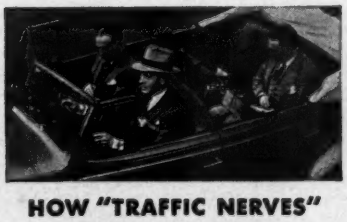
Tests show that stalling in traffic flusters the average driver so badly his pulse will jump to 35% above normal. Because NEW 76 is *designed especially for traffic*, it gives you steady, even combustion — won't stall, won't falter.

PING

Ping contributes to your "Traffic Nerves" in two ways. It adds to the steady drip, drip, drip of tiny noise impacts upon your nervous system. It makes you shift gears far more often than is necessary. NEW 76 is high enough in anti-knock to give you a s-m-o-o-t-h, quiet motor; eliminate unnecessary gear shifting.

SLOW GET-AWAY

Slow get-away at signals makes you push forward in the seat. You want to *lift* the car along. You're tense. You don't relax. NEW, traffic-blended 76 is volatile enough to overcome this. It responds *right now*—makes your car *flexible*, easier to handle.



HOW "TRAFFIC NERVES" TESTS ARE MADE

Early this year Dr. George H. Mount made a series of "Traffic Nerves" tests. By checking drivers' physical reactions, he found that the causes of "Traffic Nerves" could be accurately measured. It was these tests that led to the development of NEW traffic-blended 76 gasoline. Picture shows test car and apparatus used.

FREE *at Union Oil Stations. Get your copy of this Valuable Book*

The Union Oil Traffic Clinic, founded as a result of Dr. Mount's tests, has published a 32-page booklet, "How to Reduce Traffic Nerves," which you may obtain free at any Union Oil station. It is crammed full of facts and helpful suggestions — how to time signals, what to do about irritating noise, how to improve vision, how to sit at the wheel, and many other ingenious tips. Get your copy of this FREE book today.

Traffic Nerves Tests Showed Need for New-Type Gasoline

Dr. Mount's tests showed Union Oil engineers the need for a new-type gasoline. NEW 76 is the result—a gasoline designed *especially for traffic*. Try it next time.

UNION OIL COMPANY

1890, INDEPENDENT
1940, STILL INDEPENDENT

TULSA PUBLIC LIBRARY
TECHNICAL DEPARTMENT
TULSA, OKLA.

CALIFORNIA
OIL WORLD
and Petroleum Industry

THE AUTHORITY ON THE CALIFORNIA OIL INDUSTRY

FIRST ISSUE
SEPTEMBER 1940
VOL. 33 NO. 17
WHOLE NO. 1568

TULSA PUBLIC LIBRARY
TECHNICAL DEPARTMENT
TULSA, OKLA.

IN THIS ISSUE

R. E. Havenstrite Discovers Del Valle Field 3

Production and Development 11

Safety in Drilling Operations 12

Tide Water Associated New Alkylation Plant 14

Laugh This Off 19

Los Angeles Basin Development 20

San Joaquin Valley Development 25

Coastal District Development 28

Crude Oil Production 32

PETROLEUM PUBLISHERS, INC. PETROLEUM BUILDING
LOS ANGELES, CALIFORNIA - MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS

WALTER C. MONROE	President and Editor	VICTOR W. HEINZERLING	Assoc.-Editor
KINZIE MILLER	Vice President	DAVIS E. BROWNE	Secty.-Treas.
R. C. CONINE	Assoc.-Editor	L. O. MILLER	Advertising Manager

R. N. RICHEY, Manager, California Oil World News Service

GEORGE S. MacDONELL, Manager, California Oil World Directory

California Oil World and Petroleum Industry is published twice a month at 828 Petroleum Bldg., 714 West Olympic Blvd., Los Angeles, California. Entered as Second-class Matter January 1, 1937, at the post office at Los Angeles, California, under the Act of March 3, 1879. Subscription price: $1 per year in U. S. and Possessions, $2 in foreign countries, including Canada. Member of the Audit Bureau of Circulations.

September 11, 1940

Telephone Number Richmond 2136

R. E. Havenstrite's Del Valle Oil Discovery

Is 1940's First Major Find

Below, the Havenstrite crew is almost ready to make the crucial test, a few hours before the real magnitude of the discovery was realized.

TULSA PUBLIC LIBRARY
TECHNICAL DEPARTMENT
TULSA, OKLA.

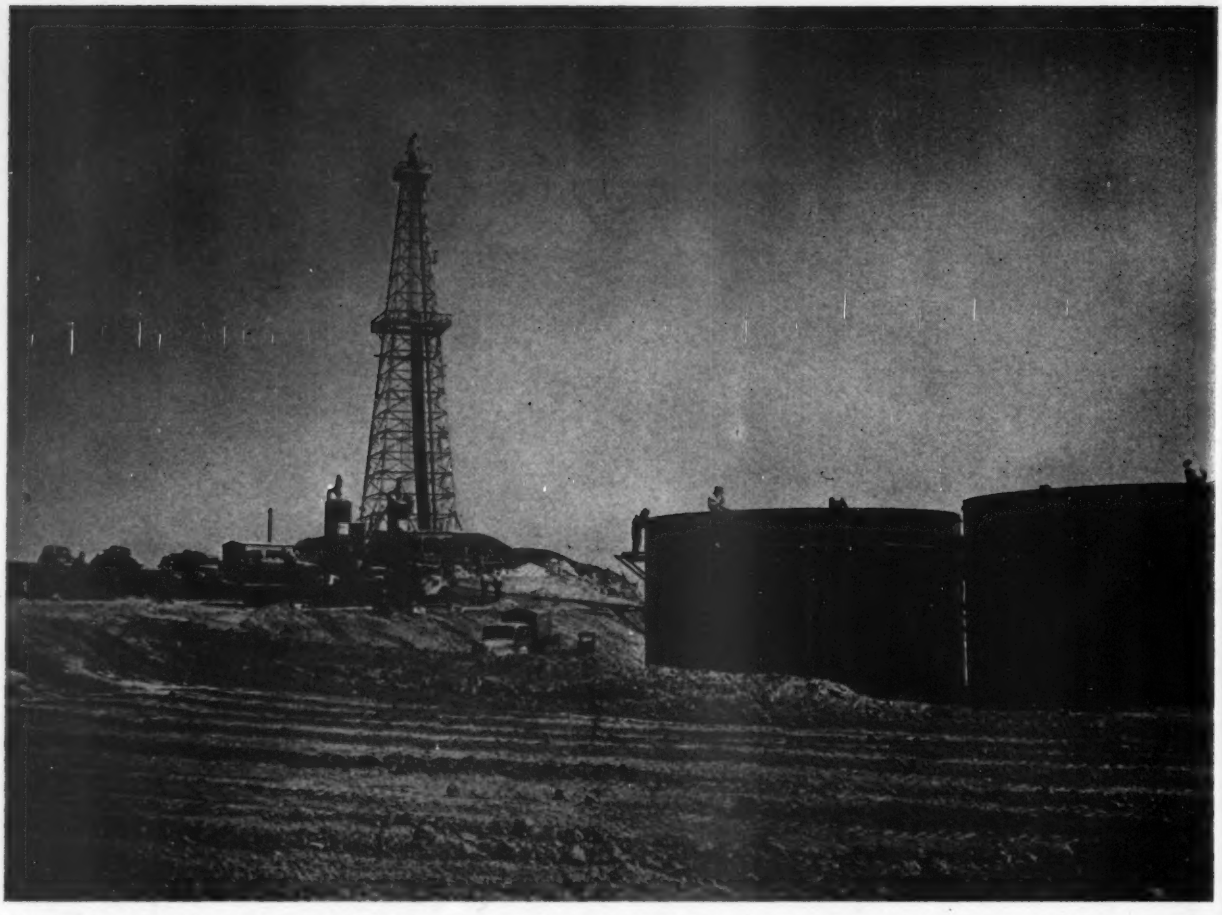
First major oil field discovery for the year 1940 and the first since Paloma in August of 1939 was credited to R. E. Havenstrite, Operator, when on Sunday night, September 8, Lincoln No. 1 was brought in to open the new Del Valle field.

Apparently tapping the sands at a structurally high point, the well came in flowing at a 1320 bbl. daily rate of 48 gravity clean oil and over 2,000,000 cu. ft. of gas through a quarter inch bean under 2100 lbs. pressure. With flow lines wide open for a short period, the gas alone was over 10,000,000 cu. ft.

Located approximately three and a half miles west of the Castaic beacon and north of the Santa Clara River, the well further demonstrates the Newhall-Castaic area to be the most fertile field for wildcatting in California.

Mechanically the well was finished at 6948 ft., 8⅝ in. casing set at 6653 ft.

On deck when R. E. Havenstrite's Lincoln No. 1 proclaimed a great new field for the Castaic-Newhall area, were, left to right: J. W. Nevius, B. C. Brooks, W. A. Masters, Don Long, T. N. Carter, John McWhirter, Ed McWhirter and R. E. Havenstrite.

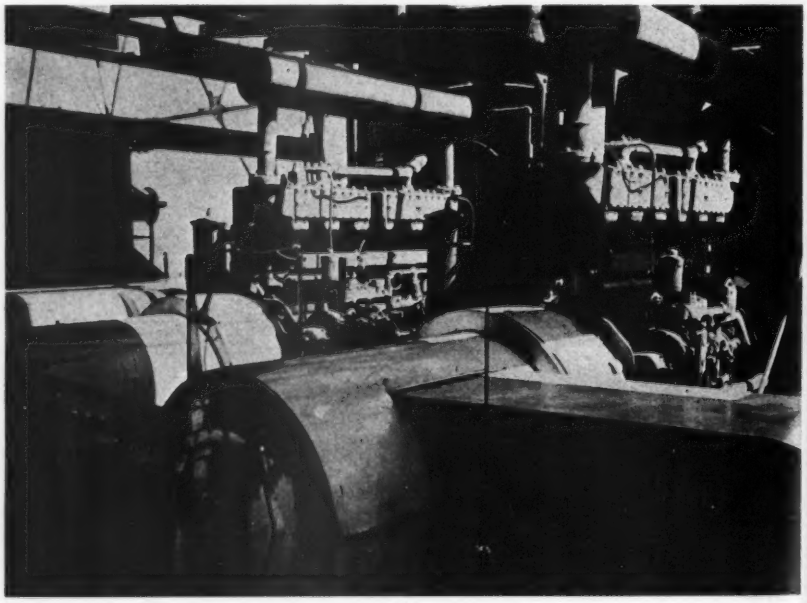


Discovery well of 1940's first major oil field find is R. E. Havenstrite's Lincoln No. 1, Del Valle, three and a half miles west of Castaic Beacon, and north of the Santa Clara River. The flow was 1320 bbls. daily through a quarter-inch bean, and 48° gravity at that.

and 335 ft. of 5 in. liner including 220 ft. of 100 mesh perforated on bottom. Tubing was hung at 6900 ft.

Sharing credit for the new field with Russell and Homer Havenstrite are R. E. Bering, who fathered the play, and R. W. Sherman who worked out the geology. History of Del Valle really starts in 1925 when Mr. Bering acquired the 160 acre property upon which Lincoln No. 1 now stands as protection acreage to the well Associated Oil Co. was then drilling on the east plunge of the same structure. At that time possibilities of the Miocene were not fully realized and Associated abandoned Newhall No. 1 at 5790 ft. without fully penetrating the Pliocene. Believing he had the cream of the structure, Mr. Bering retained his fee property through the years and took long term leases on adjoining acreage until, with additions by the Havenstrites, the play included 1500 acres at the time the well was spudded.

Shortly after resigning his position as chief geologist for Barnsdall Oil Co., subsequent to the discovery of Newhall-Potrero, Richard W. Sherman was em-



You can't blame the salesman for being proud of the work done by this "power rig" at the Havenstrite discovery.

FRESH

FROM THE CEMENT PLANT TO THE BOTTOM OF YOUR WELL... *that's* "*Bulk Cementing*" LATEST HALLIBURTON INNOVATION

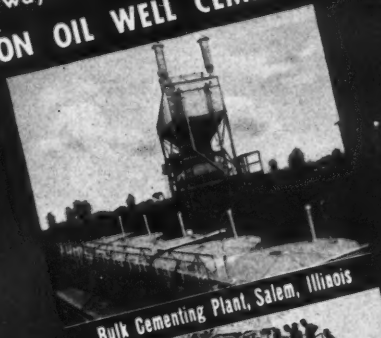
Eliminates waste, breakage and spoilage due to messy handling of cement in sacks at a well . . .

Provides faster, more uniform mixing . . .

Yet it costs no more!

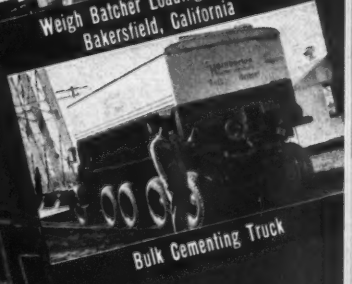
Now available in Illinois and California. Constructive program under way to make it available in other areas.

HALLIBURTON OIL WELL CEMENTING CO.



Bulk Cementing Plant, Salem, Illinois

Weigh Batcher Loading Truck at Bakersfield, California



Bulk Cementing Truck

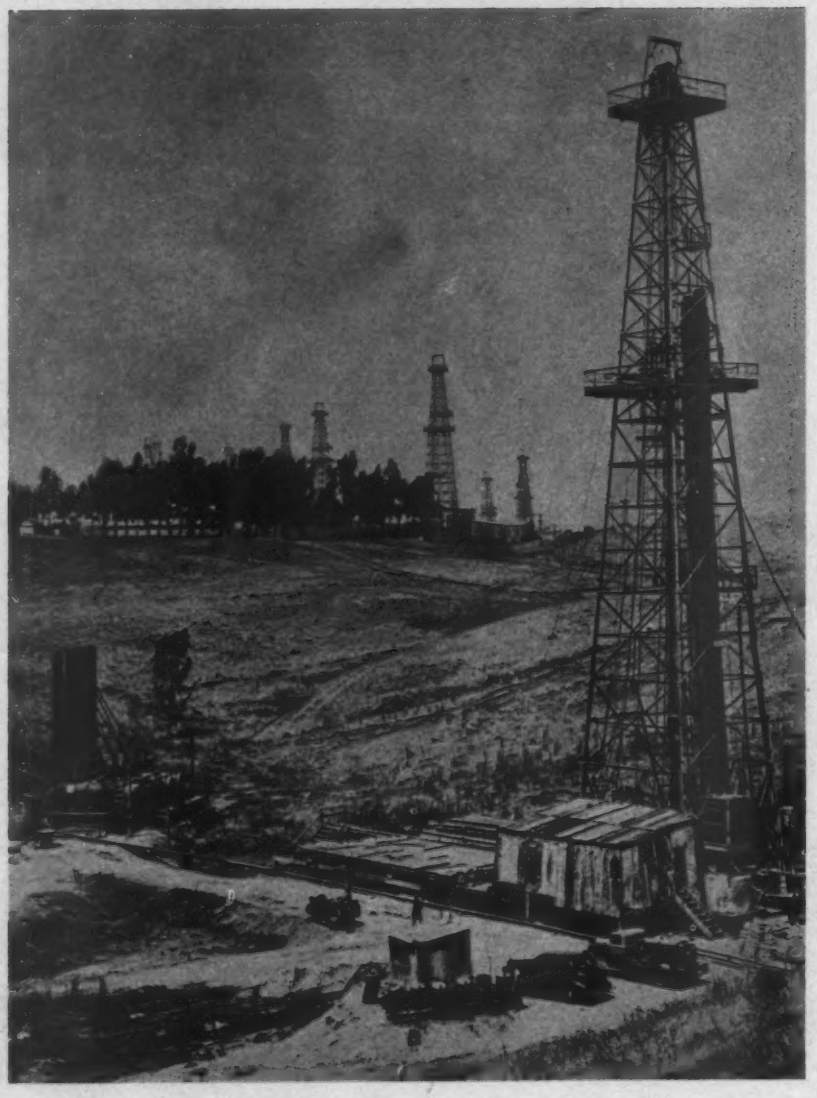
BULK PLANT AT BAKERSFIELD, CALIFORNIA

High on the structure, Havenstrite's driller had his hands full challenging 10,000,000 cu. ft. of gas. The drawworks has instrument panels which would make an aviator green with envy.

ployed to report on the area. A summary of Mr. Sherman's findings appeared in the First Issue, May, 1940, of California Oil World.

Generally, the stratigraphy of Del Valle is similar to that of the Newhall-Potrero field which lies slightly over two miles to the southeast. During the drilling of Lincoln No. 1, the top of the Pico was logged at 2193 ft. and the top of the Modelo, upper Miocene, was placed at 5750 ft. Streaks of oil sand, probably comparable to the first and second zones of Newhall-Potrero, were cored between 6000 and 6500 ft. where a solid shale body was entered which continued to 6675 ft. At the latter point, a new sand horizon was entered which, from "bug data," appeared to be lower in the geologic column than the third Newhall-Potrero zone. This phase continued to approximately 6900 ft. where the drill re-entered shale. Cuts at the top of this zone were a light straw color but darkened with depth indicating a gas cap with black oil below, a circumstance demonstrated in the gas-oil ratio of the flow.

The Havenstrite organization will proceed immediately with the drilling of a second well, location for which is being prepared 660 ft. south of No. 1.



→

Airview of the Castaic-Newhall Wildcatters' paradise. Arrow points to the R. E. Havenstrite discovery well. At lower right may be seen Barnsdall's Rancho San Francisco private oil field.

R. R. Bush Completes Deep Inglewood Test

For a disappointingly small initial rate of 500 bbls. a day, R. R. Bush Oil Co. brought in its Sentous No. 1 as the discovery well of a new producing horizon in the Inglewood-Baldwin Hills field. Because of a favorable formation test, hopes were high that production would exceed by many times that now going to the tanks.

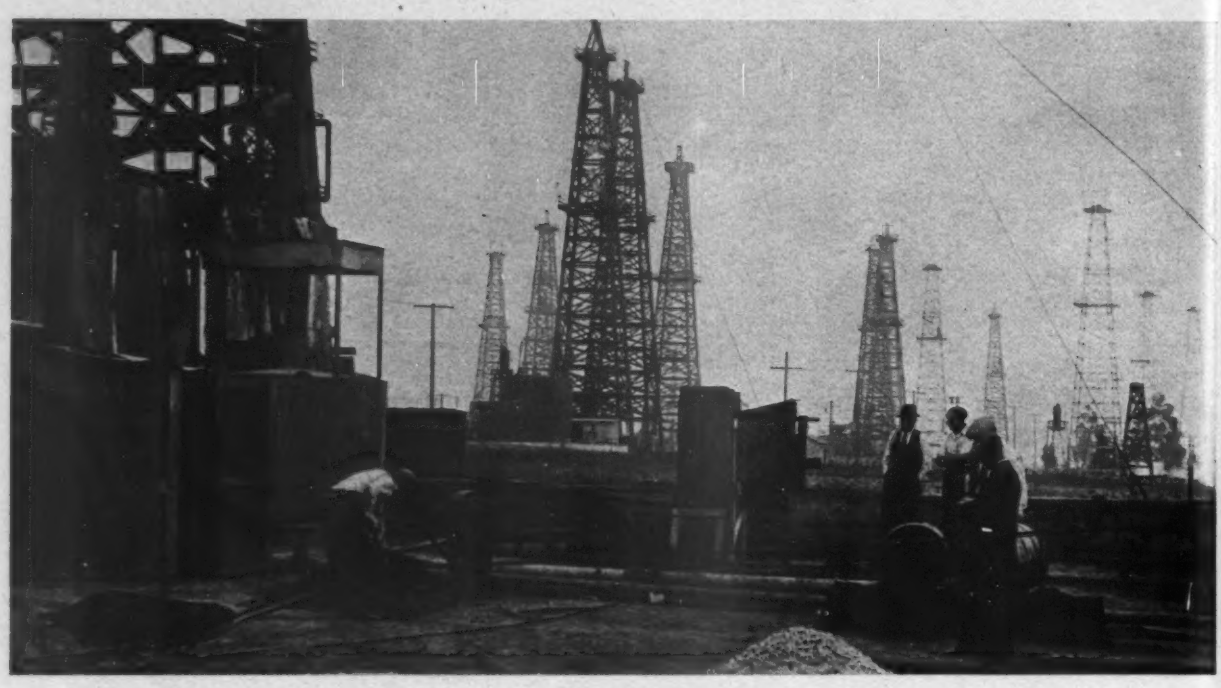
Located on the west flank of the old shallow field, Sentous No. 1 was first expected to encounter the top of the Miocene above 6000 ft. and when it was not found to 7345 ft., operations were suspended for several weeks. On resumption of drilling, the first core show-

At left is R. R. Bush Sentuous No. 1. successful deep Inglewood test which appears to improve as the days pass.

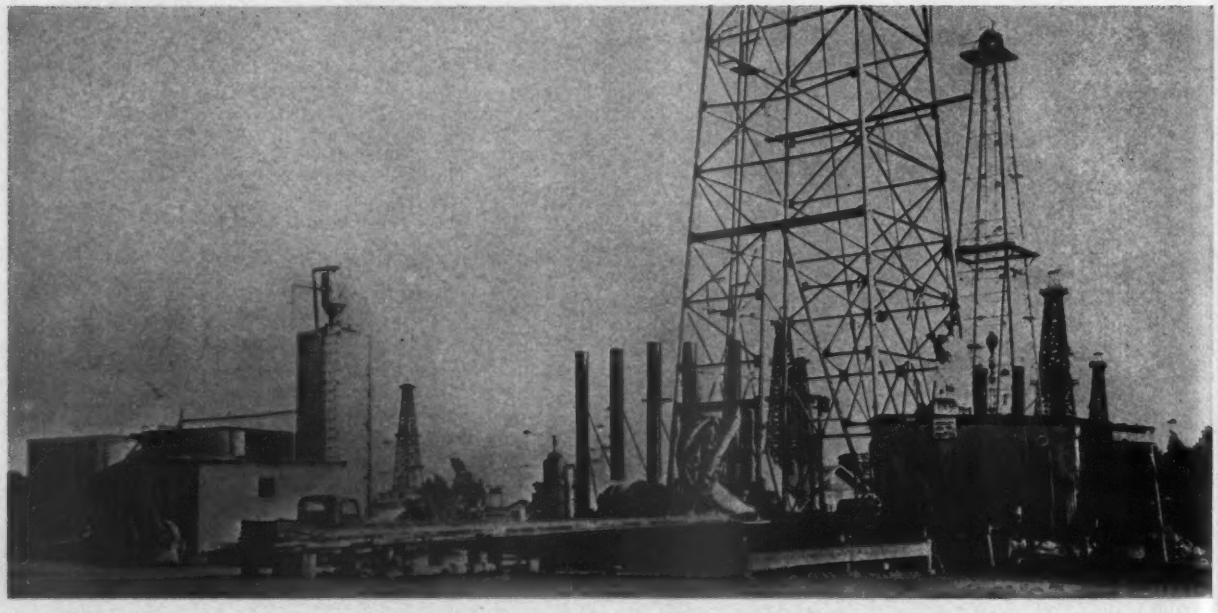
ed evidence of a transition zone and at 7500 ft. formations were definitely identified as Miocene. Below 8000 ft., stringers of hard, tight oil sand began to appear and below 8300 ft. the sand percentage increased to approximately 50%. The drilling mud from this point became badly gas cut and the ditch showed oil continuously. At 8439 ft., drilling was stopped and a formation test made of the interval below 8320 ft. With a 1000 ft. water cushion in the drill pipe, the valve was opened for an hour and fifteen minutes during which the cushion reached the surface in 18 minutes and flowed for 22 minutes with a strong gas blow. While pulling the tester, with 54 stands out, the drill pipe blew itself clean of gas, oil and fresh water.

Casing was cemented at 8325 ft. and the hole carried to present bottom at 8760 ft., where a perforated liner was landed. Tubing was run to 8735 ft. After four runs of the swab, the well started flowing heavy mud at a 96 bbl. per hour rate but soon died and it was necessary to swab occasionally to keep the fluid coming. Gradually the flow cleaned up, the last gauge showing a 525 bbl. rate of 31.8 gravity oil with a little mud.

Relatively low permeability of the sands is believed to be responsible for



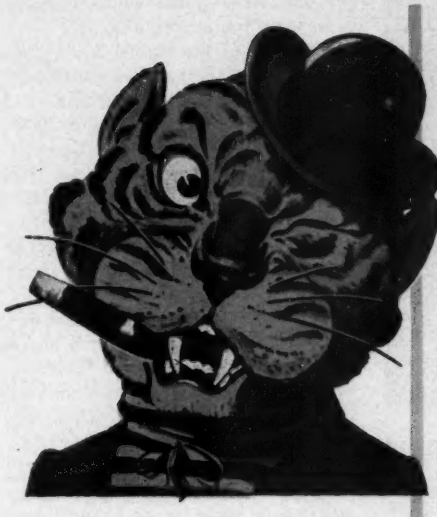
Inca Oil Corp. reached down to the 8063-8230-foot level at its Rosecrans-Athens deep test and brought up 125 bbls. daily through a 17/64-in. bean. The gravity was 32°.



Thorley Oil Co. went down to 8096 feet at its Athens 12-1 and got 221 bbls. daily of 32.5° gravity oil through a 14/64-in. bean.

HERE ARE 3 WAYS TO KEEP ME A PLENTY TOUGH TIGER

(U·S·S TIGER BRAND WIRE ROPE)



YOU don't have to humor U·S·S Tiger Brand Wire Rope . . . it's manufactured to enjoy tough going. Keep it in tip-top condition by observing the simple rules of wire rope care.

Give this product of proven quality the care and attention it deserves and it will repay you with *plus value* performance.

In the case of Tiger Brand Wire Rope, this plus value means elimination of frequent replacements, thereby keeping equipment in operation more continuously and lowering over-all operating costs.

1. ***LUBRICATION***—Like any machine with moving parts, wire rope needs frequent lubrication. As the wires and strands slide on one another there should be a film of protecting oil to lubricate them. Lubrication also lessens the destructive abrasive action of any dirt or grit that has accumulated on the rope. Its presence conditions the hemp core and adds greatly to its life. Frequent lubrication means a more efficient and longer-lived wire rope.

2. ***PROPER DRUMS—SHEAVES — REVERSE BENDS AND IMPROPER FLEET ANGLES***—There is definite relationship between the size of the individual outer wires of a wire rope and the size of the sheaves and drums about which it operates. However, individual applications must determine the number, size and position of the sheaves and drums. Sheaves and drums smaller than 200 times the diameter of the outer wires will cause a permanent set in a heavily loaded rope. For best results, heavily loaded, fast-moving ropes require sheaves and drums 800 times the diameter of the outer wires. Reverse bends and excessive fleet angles cause fatigue and should be avoided wherever possible.

3. ***ADEQUATE SAFETY FACTORS***—The safety factor in relation to loads on the rope vary with the conditions present in the individual installation. These include the load, acceleration, deceleration, rope speed, rope attachments, the number, size and arrangement of sheaves and drums, conditions causing corrosion and abrasion, length of rope and degree of danger to life and property. For general purposes, it is never advisable for the working load to exceed one-fifth the breaking strength of the rope.

Call in a Tiger Brand Wire Rope Engineer on all wire rope questions—selection of the proper type rope for the job—installation—maintenance—checking performance on the job. He's an expert—his help means dollar-saving, long-life wire rope service.

EXCELLAY *Preformed* WIRE ROPE

COLUMBIA STEEL COMPANY
San Francisco
AMERICAN STEEL & WIRE COMPANY
Cleveland, Chicago and New York
United States Steel Export Company, New York

UNITED STATES STEEL

On R. R. Bush's deep Inglewood test were: left to right, B. Harrison, A. Cundiff, C. Spear, W. Cash and E. Godard. Pusher C. L. Brain escaped the cameraman.

the production rate which was expected to be much higher after the well flowed 585 bbls. in 20 hours while running drill pipe with bottom at 8736 ft.

The first of the new drilling which is bound to result from the Bush completion is already under way with Federal Oil Co. deepening its Smith No. 1 at the north end of the field. Spudded before the discovery well, the Federal project was suspended when no Miocene was found to 6300 ft.

Standard Oil Co. has a derrick up for the first of two offsets to the new producer. The location and extent of the deep field is yet totally unknown and should it extend to the north and west, which well it might, it will include properties held by Hogan Petroleum Co., Oscar Howard, B. H. Extension Oil Co. and others.

President McCullough, hatless, is talking over future plans at Inca Oil Co.'s strike at Rosecrans-Athens. "She'll do much better when she cleans up," he says of the successful deep test.

Federal Licensing

Liberal granting of licenses for the shipment of crude oil from California is the present policy of the State Department, according to a telegram to the Oil Producers Agency from Sumner Wells, Acting Secretary of State.

The telegram says in part, "Licenses are being issued freely for the export of all crudes except those mixed with iso-octane, isopentane, neohexane or alkylates", which will make it possible for shipments of unmixed crude oil to continue from California to all points outside the western hemisphere.

The telegram, addressed to Rush M. Blodget, executive Vice president of Oil Producers Agency, was in reply to a telegram sent by the Agency to the State Department in an effort to clarify the definition of "aviation gasoline" given in the President's proclamation of July 26.

Inca is building tankage on the Grady lease, where the company brought in Athens 12-1. On the job are G. R. Fosnaugh, Inca; Elmer Sayers, Ross Ledbetter, P. C. and E. C. Jorderson, all of Sayers & Ledbetter Tank Contracting Co.

Production « « » » Development

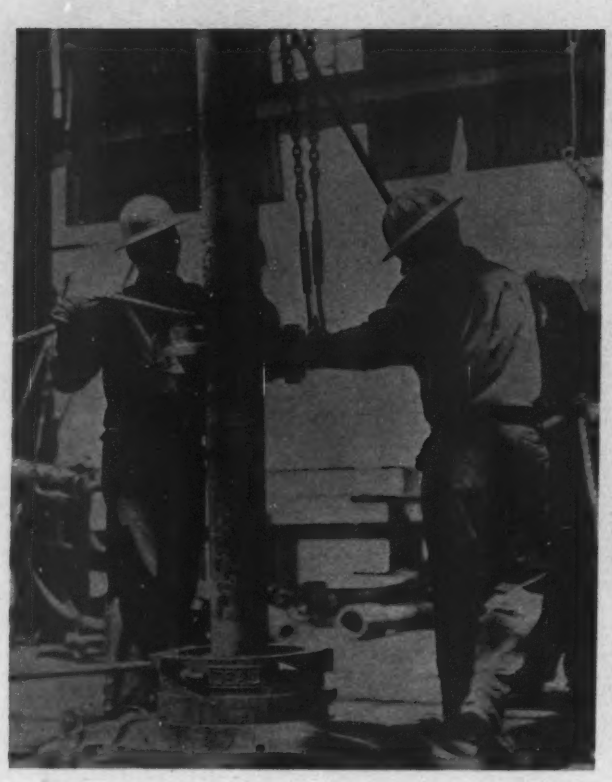
(Figures of Production and Stocks are in barrels of 42 Gals.)

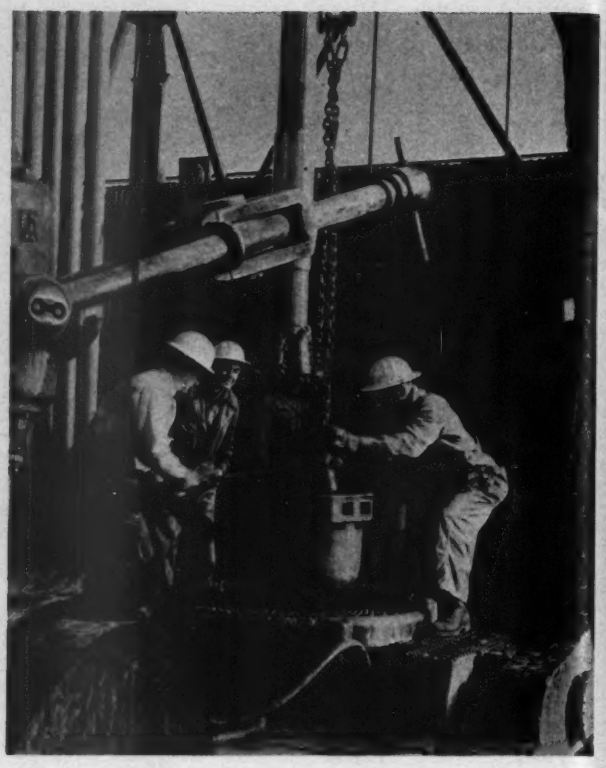
	Total Production July	—DAILY AVERAGE— July, 1940	June, 1940	July, 1939
Group No. 1				
Arvin	54,232	1,749	1,856	1,366
Belridge—North	315,800	10,187	10,779	11,842
Belridge—South	66,723	2,152	2,046	1,134
Canal	171,828	5,543	5,840	5,521
Canfield Ranch	1,120	36	38	102
Coalinga	869,449	28,047	26,793	19,143
Cole's Levee	112,328	3,624	3,742	834
Edison	73,509	2,371	2,351	2,267
Elk Hills	380,973	12,289	12,275	10,680
Fruitvale	175,626	5,665	5,703	6,185
Greeley	124,265	4,009	3,902	2,267
Kern River	331,214	10,684	11,859	11,375
Kettleman Middle Dome	.....	.....	.....	28
Kettleman North Dome	1,448,645	46,731	46,900	52,386
Lost Hills	114,183	3,683	3,800	3,285
McKittrick	111,378	3,593	3,679	3,657
Midway-Sunset	1,548,378	49,948	51,378	50,326
Mountain View	200,618	6,472	6,616	8,177
Mount Poso	283,677	9,151	9,454	11,106
Paloma	15,717	507	347	.....
Rio Bravo	293,676	9,473	7,645	7,801
Round Mountain	215,098	6,939	7,076	8,365
Strand	48,982	1,580	1,588	248
Ten Section	294,760	9,508	9,566	9,190
Tupman	110,527	3,565	2,006	482
Wasco	49,033	1,582	1,681	1,218
Wheeler Ridge	9,352	302	304	323
Group No. 2				
Capitan	51,937	1,675	1,755	2,328
Elwood	106,256	3,428	3,515	4,095
Rincon	143,610	4,633	4,017	2,514
San Miguelito	98,183	3,167	3,303	2,522
Santa Barbara	6,427	207	232	321
Santa Maria	225,130	7,262	6,466	7,439
Santa Maria Valley	576,043	18,582	16,974	12,896
Summerland	750	24	17	32
Ventura Avenue	1,056,156	34,070	34,223	36,703
Ventura-Newhall	229,191	7,393	7,573	6,445
Watsonville	775	25	25	30
Group No. 3				
Brea-Olinda	181,300	5,848	5,768	5,697
Coyote—East	137,410	4,433	4,027	2,573
Coyote—West	241,160	7,779	6,695	10,014
Domingues	664,133	21,424	21,638	17,592
El Segundo	66,849	2,156	2,181	2,983
Huntington Beach	774,637	24,988	25,782	25,271
Inglewood	368,069	11,873	12,045	12,758
Lawndale	1,301	42	34	47
Long Beach	1,343,183	43,329	44,100	45,146
Los Angeles-Salt Lake	16,521	533	536	499
Montebello	585,491	18,887	21,654	18,609
Playa Del Rey	123,856	3,995	4,096	4,964
Potrero	47,501	1,532	1,661	1,100
Richfield	284,757	9,186	9,103	8,800
Rosecrans	439,886	14,190	11,746	10,750
Santa Fe Springs	812,841	26,221	26,356	27,402
Seal Beach	221,399	7,142	7,171	6,898
Torrance	326,311	10,526	10,898	16,788
Whittier	5,745	185	181	950
Wilmington	2,564,509	82,726	84,470	83,070
Total	19,122,398	616,851	617,464	606,553
June	18,523,925	617,464		
Decrease (*Increase)	598,473*	613		

	New Rigs Up	Active Drilling	Producers Completed	Daily Initial Output	Active Producing	Abandoned Wells Drillers	Abandoned Wells Producers
Group No. 1							
Arvin	..	.....	.....	.....	16	.....	.....
Belridge—North	..	3	1	756	82	.....	.....
Belridge—South	..	.....	.....	.....	167	.....	.....
Canal	..	1	.....	.....	33	.....	.....
Canfield Ranch	..	.....	.....	.....	1	.....	.....
Coalinga	6	13	13	26,856	902	.....	.....
Cole's Levee	..	4	2	870	24	.....	.....
Edison	1	1	1	100	95	.....	.....
Elk Hills	..	.....	.....	.....	194	.....	.....
Fruitvale	..	.....	1	80	171	.....	2
Greeley	2	2	3	7,656	31	.....	.....
Kern River	1	1	1	5	1,556	.....	.....
Kettleman No. Dome	2	9	3	5,076	263	.....	1
Lost Hills	..	.....	.....	.....	273	.....	.....
McKittrick	..	1	1	25	200	.....	.....
Midway-Sunset	2	7	.....	.....	2,542	.....	1
Mountain View	1	1	.....	.....	185	.....	1
Mount Poso	1	2	.....	.....	296	.....	.....
Paloma	1	2	1	960	3	.....	.....
Rio Bravo	4	9	3	4,480	56	.....	.....
Round Mountain	3	1	.....	.....	221	.....	.....
Strand	..	1	.....	.....	9	.....	.....
Ten Section	2	3	5	7,159	54	.....	.....
Tupman	2	13	7	9,390	19	.....	.....
Wasco	..	2	.....	.....	11	.....	.....
Wheeler Ridge	..	1	.....	.....	34	.....	.....
Group No. 2							
Capitan	..	.....	.....	.....	42	.....	1
Elwood	..	.....	.....	.....	74	.....	.....
Rincon	2	2	2	527	65	.....	.....
San Miguelito	..	1	1	1,541	23	.....	.....
Santa Barbara	..	.....	.....	.....	19	.....	2
Santa Maria	1	2	.....	.....	178	.....	.....
Santa Maria Valley	1	2	.....	.....	143	.....	.....
Summerland	..	1	.....	.....	8	.....	.....
Ventura Avenue	2	8	5	11,983	318	1	.....
Ventura-Newhall	5	9	5	3,608	531	.....	.....
Watsonville	..	.....	.....	.....	7	.....	.....
Group No. 3							
Brea-Olinda	1	1	.....	.....	354	.....	.....
Coyote—East	3	1	2	974	86	.....	.....
Coyote—West	..	1	.....	.....	61	.....	.....
Domingues	2	4	4	2,895	189	.....	.....
El Segundo	..	.....	.....	.....	43	.....	.....
Huntington Beach	3	4	2	440	540	.....	.....
Inglewood	..	1	.....	.....	207	.....	.....
Lawndale	..	.....	.....	.....	5	.....	.....
Long Beach	2	5	2	257	1,219	1	9
Los Angeles-Salt Lake	..	.....	.....	.....	103	.....	.....
Montebello	..	3	2	658	343	.....	.....
Playa Del Rey	..	.....	.....	.....	157	.....	.....
Potrero	1	1	1	275	19	.....	.....
Richfield	1	1	1	150	302	.....	.....
Rosecrans	4	8	4	4,775	161	.....	.....
Santa Fe Springs	..	.....	.....	.....	583	.....	2
Seal Beach	..	.....	.....	.....	118	.....	1
Torrance	1	1	.....	.....	651	.....	3
Whittier	..	.....	.....	.....	38	.....	.....
Wilmington	11	11	12	4,942	848	.....	.....
Miscellaneous Drilling	6	27	.....	.....	.....	17	.....
Group No. 4—Gas Fields							
Buena Vista Lake	..	.....	.....	.....	1	.....	.....
Buttonwillow	..	.....	.....	.....	1	.....	.....
Chowchilla	..	.....	.....	.....	.....	.....	.....
Delano	..	.....	1	Gas	14	.....	1
Fairfield Knolls	..	.....	.....	.....	.....	.....	.....
Goleta	..	.....	.....	.....	.....	.....	.....
Marysville Buttes	..	.....	.....	.....	3	.....	.....
McDonald Island	..	.....	.....	.....	5	.....	.....
Rio Vista	1	1	.....	.....	21	1	.....
Semi-Tropic	..	.....	.....	.....	.....	.....	.....
Tracy	..	.....	.....	.....	3	.....	.....
July	75	172	86	96,438	14,921	20	24
June	92	175	73	75,475	15,107	13	48
Decrease (*Increase)	17	3	13*	20,963	186	7*	24

SUMMARY OF CALIFORNIA OILFIELD OPERATIONS FOR JULY, 1940—STOCKS HELD IN PACIFIC COAST TERRITORY BY CALIFORNIA OIL COMPANIES

	July 31, 1940	June 30, 1940	July Changes	July 31, 1939
1. Gasoline-Bearing Crude	36,116,475	35,190,264	+ 926,211	38,200,974
2. Non-Gasoline Bearing Crude	13,217,848	13,340,198	− 122,350	14,390,754
3. Unblended Nat. Gas	2,627,668	2,418,391	+ 209,277	2,352,460
4. Gasoline (not including distributing and service stations)	14,831,909	16,264,529	− 1,432,620	13,775,601
5. Naphtha Distillates	1,888,095[1]	1,855,903[1]	+ 32,192	1,360,988[1]
6. Gas Oil and Diesel Oil	9,857,816	9,733,721	+ 124,095	10,071,238
7. Fuel Oil Residuum	64,319,349	65,127,849	− 808,500	71,275,300
8. All Other Stocks	9,021,682[2]	8,775,852[2]	+ 245,830	7,419,153[1]
TOTAL	151,880,842	152,706,707	− 825,865	158,846,468
[1]Estimated amount of unfinished gasoline in item 5	1,689,155	1,660,599		1,122,574
[2]Coke included in item 8	1,208,275	1,300,640		361,629





Left: Tongs figure directly or indirectly in many accidents, because they are constantly being used under high speed conditions. Great strides have been made in perfecting tongs and in developing safe methods of using them. Right: The illustration on the right shows a crew in the act of lifting out the heavy rotary bushing with a special type hook. Note the well guarded rotary table and drive gear; also the substantial shoes, safety hats and gloves worn by the crew to obtain maximum personal protection.

The Oil Industry Takes Safety Seriously

By C. A. Bonner
Supervising Engineer
Industrial Indemnity Exchange

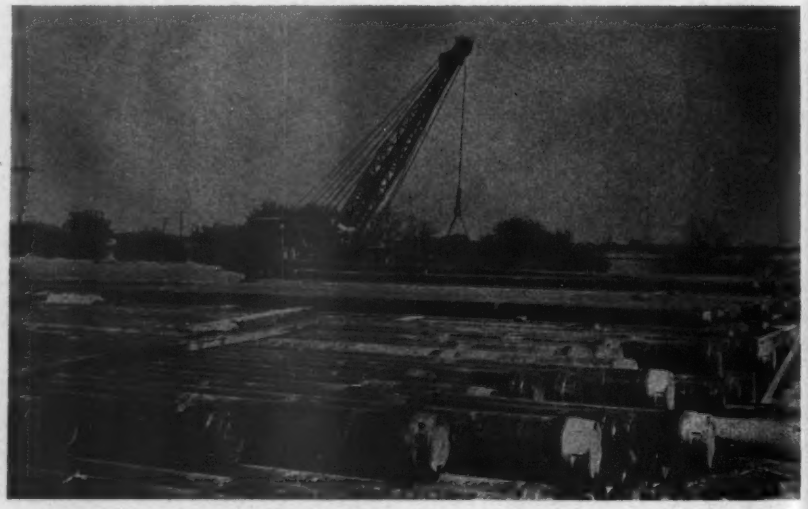
Fifteen, ten, even five years ago, oil production was considered among the "bad boys" of industry as far as industrial accidents were concerned. Today, due to the disposition of both management and men to take safe practices seriously, rapid strides are being made not only in reducing the number of accidents but also in minimizing their severity.

As far as we know, oil companies were among the first, if not the first, major industrial concerns in California to band themselves together for mutual promotion of safe practices. And their efforts along these lines have met with ready response and full cooperation from enlightened workers who now pretty generally recognize that it is no indication of lack of hardihood for a man to try to guard against death or serious injury. Their recommendations have been gratefully received by manufacturers of equipment used in oil production who have cooperated enthusiastically in improving and safeguarding machinery.

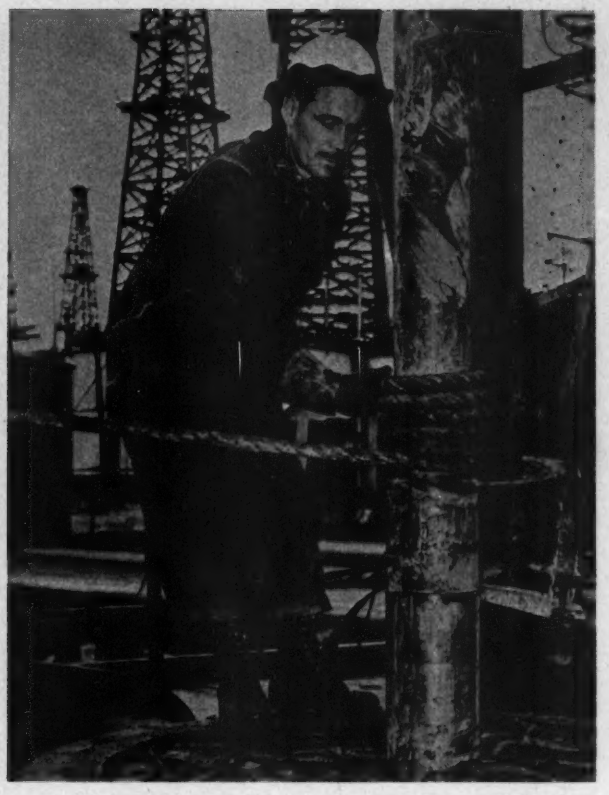
This receptiveness to the idea of promoting safe practices and safe equipment creates an ideal situation for the engineers of insurance companies who are serious in their determination to reduce accident frequency and severity for their policyholders.

In many operations, we find that our recommendations have already been anticipated through the alertness of management or men, or both. In others, we have only to suggest improvements in order to have them carried out with alacrity.

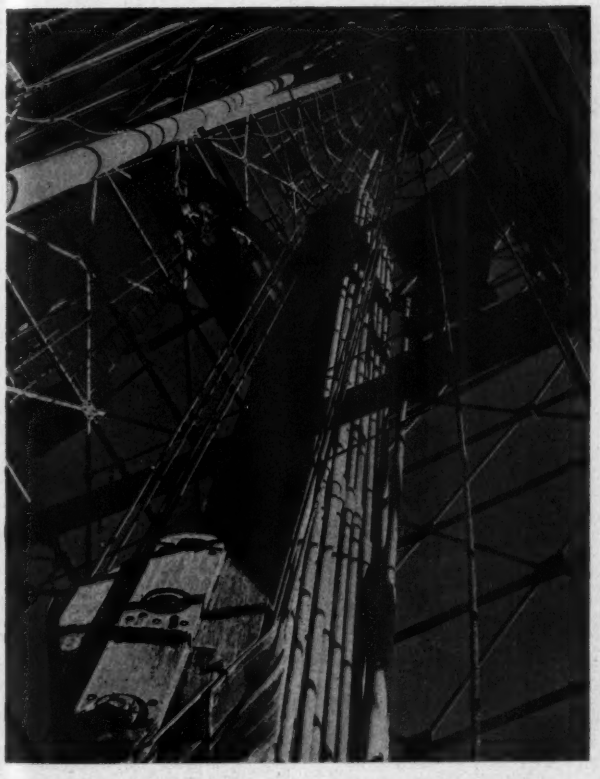
To illustrate to what an extent oil companies are promoting safety today, and how well safe practices have been accepted by workers, we selected and photographed several operations in connection with oil drilling, each of which can be a source of great hazard. Captions with each photograph point out the safe practices it illustrates.

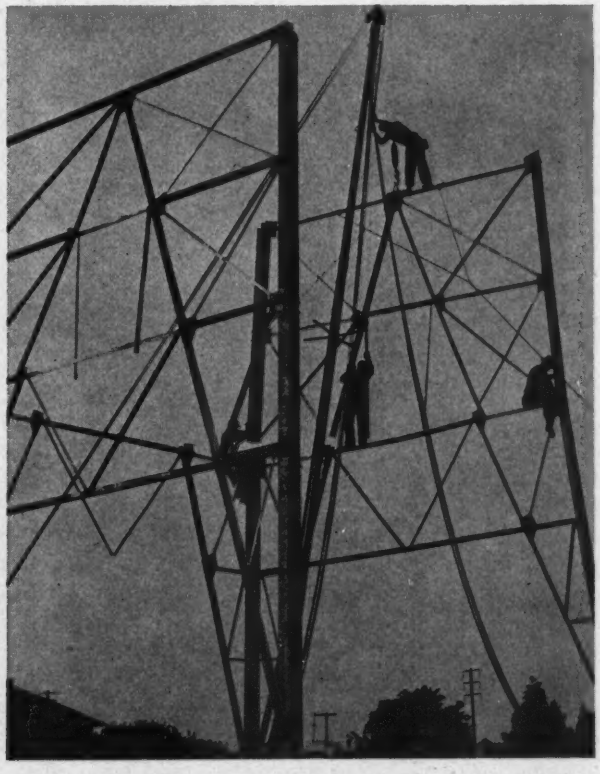


Dependable equipment safeguards men loading drill pipe. Good protectors on the pipe threads eliminate ruined threads as a source of waste and hazard.



Left: All too frequently, loss of hands and arms are due to grooved or defective catheads which cause lines to foul. Safe practice demands discarding the cathead as soon as any defect appears. Right: Lowering grief stem sections into the hole calls for fast work. Clean-sanded decks help avoid accidents.





Left: Racking drill stems and pulling casing is an operation requiring first-class equipment plus well trained and careful men, if injuries are to be avoided. Right: The present high speed method of erecting steel derricks requires experienced men and first-class equipment. Bolters-up in the photo above are wearing safety belts as an added precaution.

Tide Water Associated Builds Alkylation Plant at California Refinery

Present day demands for increased production of high octane aviation gasolines and improved quality of commercial motor fuels has prompted the Associated Division of Tide Water Associated Oil Co. to construct a sulphuric acid alkylation plant embodying the latest technical developments. The new unit, completed in June 1940 is producing high octane fuels from iso-butane and butylenes available at the Avon Refinery, located on San Francisco Bay.

Some time ago the Research and Development Department of Associated Division embarked on an extensive laboratory program to determine the applicability of alkylation in conjunction with other Avon refining processes. Preliminary results were sufficiently encouraging to warrant further study of the process on a larger scale. A pilot plant was therefore constructed and operated for many months under various arrangements of flow and with different kinds of charging stock. Results thus obtained indicated the desirability of adding alkylation to processing procedures then employed and decision was reached to proceed with the installation of a plant. The license for the process was granted by Shell Development Co. under their own patent rights and those of Texaco Development Corp., Standard Oil Development Co., and Anglo-Iranian Oil Co., Ltd.

Contract for the construction of the plant was awarded to C. F. Braun & Co. of Alhambra, Calif. Through excellent cooperation from the contractor, the plant was put on stream in the latter part of June, 1940, fourteen weeks after the contract was awarded. The process yields two types of alkylate, that is a light blending stock, testing 92-93 octane number, suitable for blending in high quality products such as aviation fuels, and heavy alkylate of slightly lower octane number. The entire plant was designed with the idea of later increasing its capacity by 50% by the addition of a second reactor unit. This enlargement can be accomplished with a minimum of change in the existing unit as fractionating towers, reboilers, heat exchangers, condensers and pumps are all designed for the enlarged capacity.

Charging Stocks

The principal hydrocarbons involved in the alkylation reaction are iso-butane and butylene. The iso-butane bearing charging stock for the alkylation process is derived from three primary sources—cracking plant operations, straight-run gasoline stabilization and butanes transported to the refinery from natural gasoline plants processing gases from Tide Water Associated wells.

TABLE 1

CHARGE OF ALKYLATION UNIT

	Cracked Percent	Straight-Run Percent	Percent of Total Charge
Propane	5.1	13.8	7.5
Iso-butane ...	15.4	35.3	20.8
Butylenes ...	38.5	....	28.0
N-Butane ...	41.0	50.9	43.7
Heavier	....	....	....
	100.0%	100.0%	100.0%

The butylene charge stock is derived from two debutanizer units which handle the entire production of depropanized pressure distillate from three large cracking and reforming units. These debutanizer columns are capable of fractionating overhead up to 1425 bbls. per day of butylene containing alkylation charge stock. The bottoms product from the debutanizer is a stabilized gasoline containing a maximum of 3% butanes.

Three Hortonspheres were erected to provide working storage in connection with the operation of the alkylation plant. Straight-run butane containing propane, iso-butane and normal butane is stored in a 2500-bbl. spherical tank designed for 75 lbs. working pressure. Cracked butane stock containing iso-butane, butylenes and normal butane from the pressure still debutanizer units is stored in a 2000-bbl. sphere with a working pressure of 60 lbs. per sq. in. A third sphere of 12,000-bbl. capacity and 60 lb. working pressure is provided to store the normal butane by-product fractionated from the charge, until this material is required for gasoline blending or polymerization plant charge.

These spheres are painted with white tank lacquer to keep temperatures as low as possible.

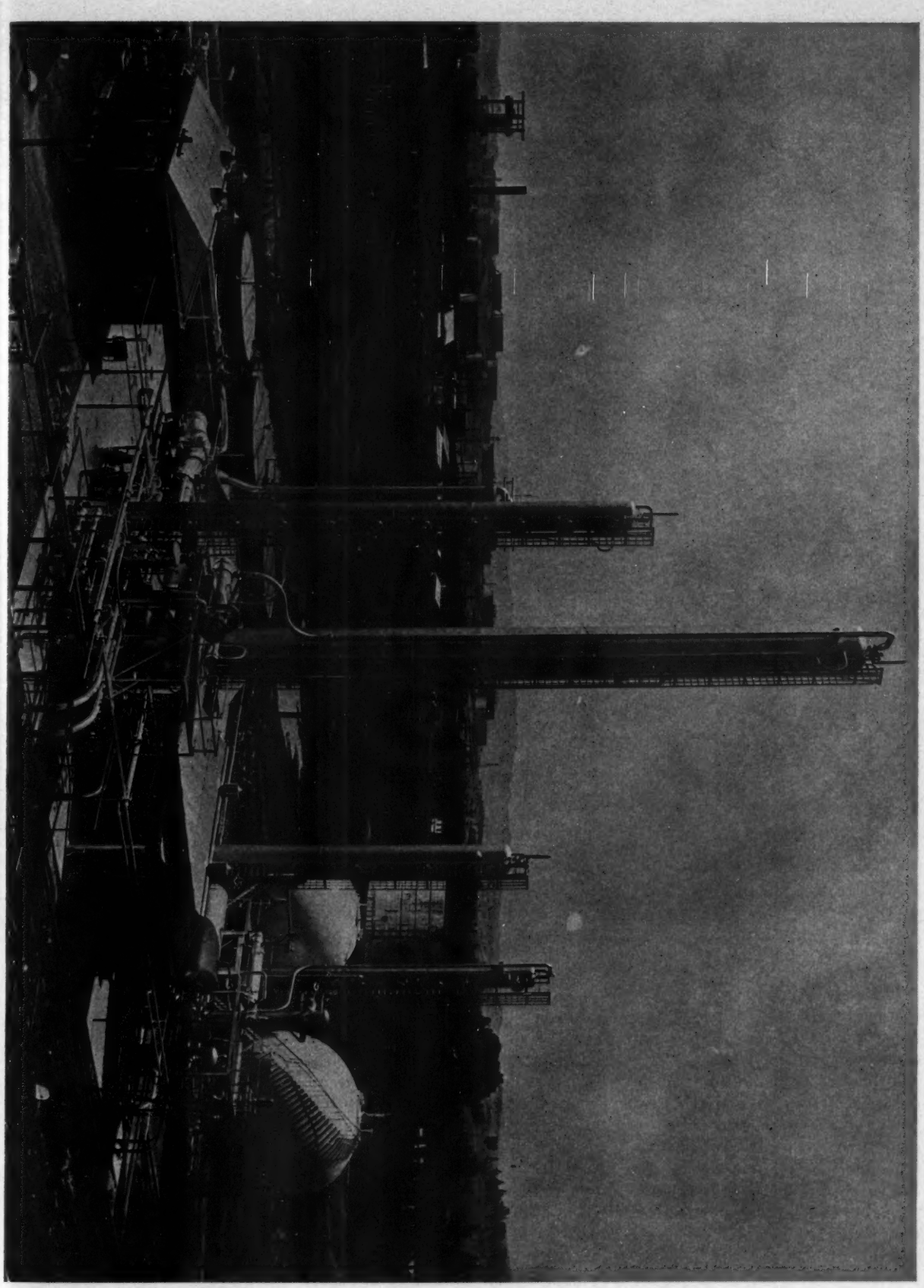
Description of Process

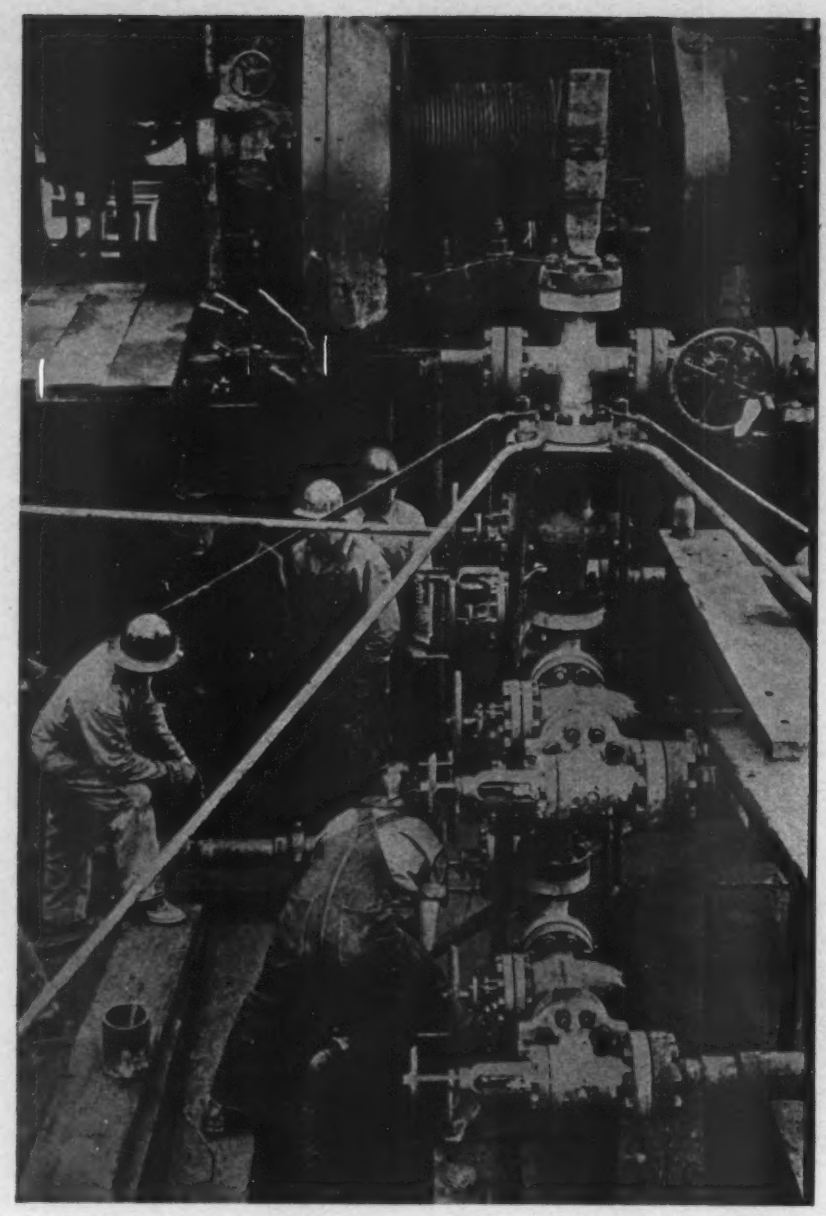
The average charge is made up of 73% cracked butanes and 27% straight-run butanes, the latter being derived from crude unit stabilization and outside sources. The cracked butanes are charged one-quarter to the reactor unit and three-quarters to the alkylation deiso-butanizer column. This split is made for the purpose of recovering the maximum amount of iso-butane contained in the cracked butanes and to allow discarding surplus butylenes not required for alkylate production.

Table 1 shows the approximate composition of the charging materials.

The deiso-butanizer column is a 60 tray fractionating column operating under high reflux rates which cuts between the iso-butane and normal butane allowing the elimination of all normal butane and excess butylene from the system as the bottoms product. These butanes are used for gasoline blending and as charging stock to a large thermal polymerization plant.

The overhead from the deiso-butanizer, consisting largely of iso-butane together with propane and butylenes, is charged to a 40 tray depropanizer column where propane is eliminated from the system.





Some of Tide Water Associated's oil wells require the largest of high pressure christmas tree installations.

The propane product is also charged to the Avon polymerization plant for conversion into high octane thermal polymer gasoline. The bottom product from the depropanizer tower, consisting of iso-butane concentrate, is charged to the reactor system along with the remainder of the cracked butane charge and sulphuric acid. In this specially designed reactor system, the hydrocarbons are intimately contacted with fresh 98% sulphuric acid and recycle acid in large turbine-driven centrifugal pump. The Moore turbine powering this unit is operated by 150 lbs. plant steam which is exhausted against 20 lb. back pressure. The exhaust steam furnishes a considerable portion of the heat required by the depropanizer and deiso-butanizer reboilers. In Avon operations acid is withdrawn from the reactor system when it drops to 90% concentration. The iso-butane to butylene ratio in the charge to the reactor is maintained at between 5 to 1 and 8 to 1 which is about the optimum range to produce maximum yields of high octane products. (1)

The fresh acid being charged to the reactor system is added continuously by means of a special variable stroke plunger pump, which is capable of charging the proper quantity of 98% acid required by the process, to keep the strength of the total acid in the system above 90%.

A roof shelter without sides is installed over the reactor and acid handling pumps.

The acid and hydrocarbon mixture discharged by the reactor unit pump is cooled in a specially designed refrigeration exchanger unit. By means of propane refrigeration, the heat of reaction is removed and the temperature in the reaction cycle is maintained at 40° to 50° F. The propane used in this cycle is compressed by means of two Worthington LCE-4 angle type gas engine driven compressors. Each of these units is equipped with two 8-in. gas compressor cylinders and the engines are equipped with a number of safety devices. These compressors along with the starting air system are housed in a reinforced concrete building with hollow tile walls. In order to provide quiet operation of these units, Maxim exhaust silencers have been installed.

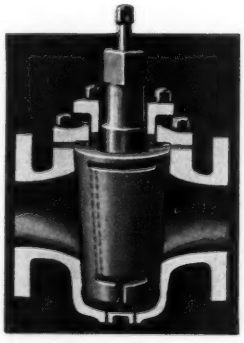
The mixture from the reactors which is about one-half acid and one-half hydrocarbon, is freed from the acid in a separating vessel and the hydrocarbons neutralized in a conventional caustic mixing and settling apparatus.

The neutralized hydrocarbon products consisting mainly of alkylate and unreacted iso-butane are charged to a 30 tray alkylate stabilizer where the alkylate is debutanized to Reid Vapor Pressure specifications and the overhead of recycle iso-butane is returned to the deiso-butanizer column.

The stabilized alkylate bottoms

(1) Oil and Gas Journal 38, (No. 27), 104, 1939.

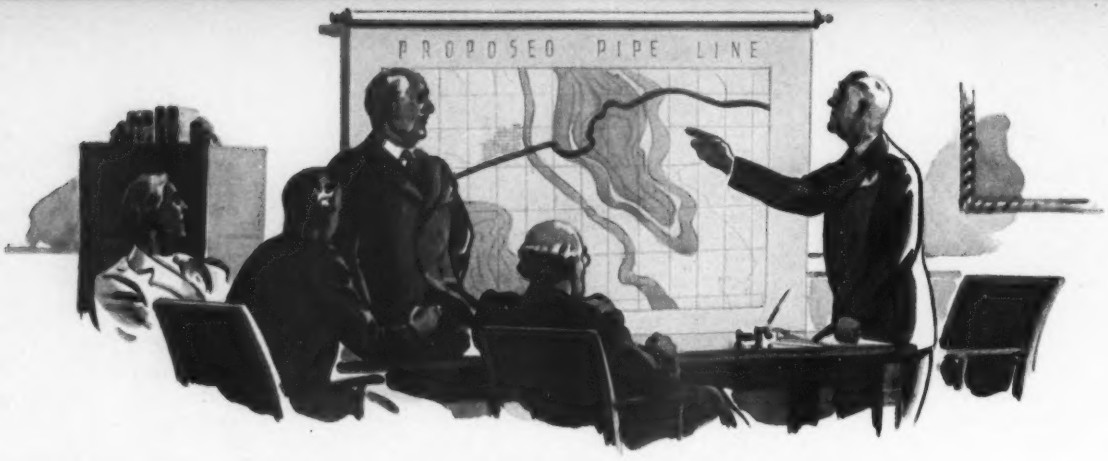
. . . There Stands a Gate with 7 Locks



At the south entrance of the great King Ranch in Texas there stands a gate. It is fastened by lengths of chain, joined by seven padlocks. For each lock there is a key; for each key an employee. So, if a lock is left unfastened, someone has explaining to do. How *simple!* How *effective!* ¶Like an unlocked gate, a *valve* failure may cause tens of thousands of dollars in loss.

There are 7 principal valve responsibilities completely mastered by Nordstrom Lubricated Valves, namely: 1. Always easy to turn. 2. Fully leak-resistant. 3. Free from clogging. 4. Withstand highest pressures. 5. Operate at highest and lowest temperatures. 6. Resist corrosion and erosion. 7. Attain longest life. *Install Nordstroms. The saving is evident at every turn!*

NORDSTROM VALVES *give 7-way protection*



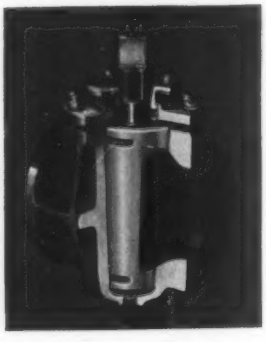
...So they invested $40,000 more and gained a valve bargain

A costly pipe line was recently installed involving the purchase of valves running into six figures. Valve bids were called. The Nordstrom Valve bid was approximately $40,000 more than for ordinary valves. The purchasing board favored the lower quotations.

"I'd like to see us choose Nordstroms, but $40,000 is a lot of money. Maybe we had better save it and take a chance," declared one of the officials.

"H'm, there must be a good reason why Nordstroms are so extensively adopted for pipe lines," commented a director of the company. "But," he continued, "I think we can use the cheaper valves. They won't be operated more than once or twice a year, maybe not that often."

Finally the Line Superintendent was invited to present his recommendations.



It isn't the price of a valve that counts; it's the service it renders. Choose Nordstroms. They keep up-keep down.

"A single valve failure could cost us more than $40,000," he commented. "Personal injuries as well as material losses can occur. Who will take the responsibility? Some of these valves won't be closed once in five years; then, no doubt, only for an emergency. A valve with exposed seats might corrode. Stuff can settle in the recesses, so it can't close tightly. From my observation Nordstrom Valves will always open or close, no matter for how many years they are untouched," he declared.

This set the officials to thinking. They investigated.

The result? Nordstrom won the order. Yet, even though the valves cost $40,000 more, the savings in upkeep and the safety insurance for decades to come will *far offset* this extra initial investment.

Nordstrom LUBRICATED VALVES

Sealdport Lubrication

MERCO NORDSTROM VALVE COMPANY—*a Subsidiary of* Pittsburgh Equitable Meter Company

WORLD'S LARGEST MANUFACTURERS OF LUBRICATED PLUG VALVES; GASOLINE, OIL & GREASE METERS

Main Offices: 400 Lexington Ave., Pittsburgh, Penna.

BRANCHES: New York City, Buffalo, Philadelphia, Columbia, Memphis, Chicago, Kansas City, Des Moines, Tulsa, Houston, Los Angeles, Oakland.

CANADIAN Licensees: Peacock Bros., Ltd., Montreal. • *EUROPEAN Licensees:* Audley Engineering Co., Ltd., Newport, Shropshire, England

PRODUCTS: Nordstrom Lubricated Valves; Air, Curb and Meter Cocks • Nordstrom Valve Lubricants • EMCO Gas Meters • EMCO-McGaughy Integrators EMCO Regulators • Pittsburgh Meters for Gasoline, Grease, Oil, Water and other Liquids • Raybould Couplings • Stupakoff Bottom Hole Gauges

product is charged to a rerun tower where it is separated into three products. The overhead stream is controlled to 300° F. A.S.T.M. end point specifications and is suitable for blending into high quality super-octane aviation fuels. A side cut is withdrawn and stripped to provide an intermediate fraction of about 300° to 400° F. boiling range. A small amount of heavy alkylates produced in the process is withdrawn from the bottom of the alkylate rerun column after steam stripping. An excellent degree of fractionation is obtained in the return tower, which utilizes a small amount of 250-lb. refinery steam as a heating medium.

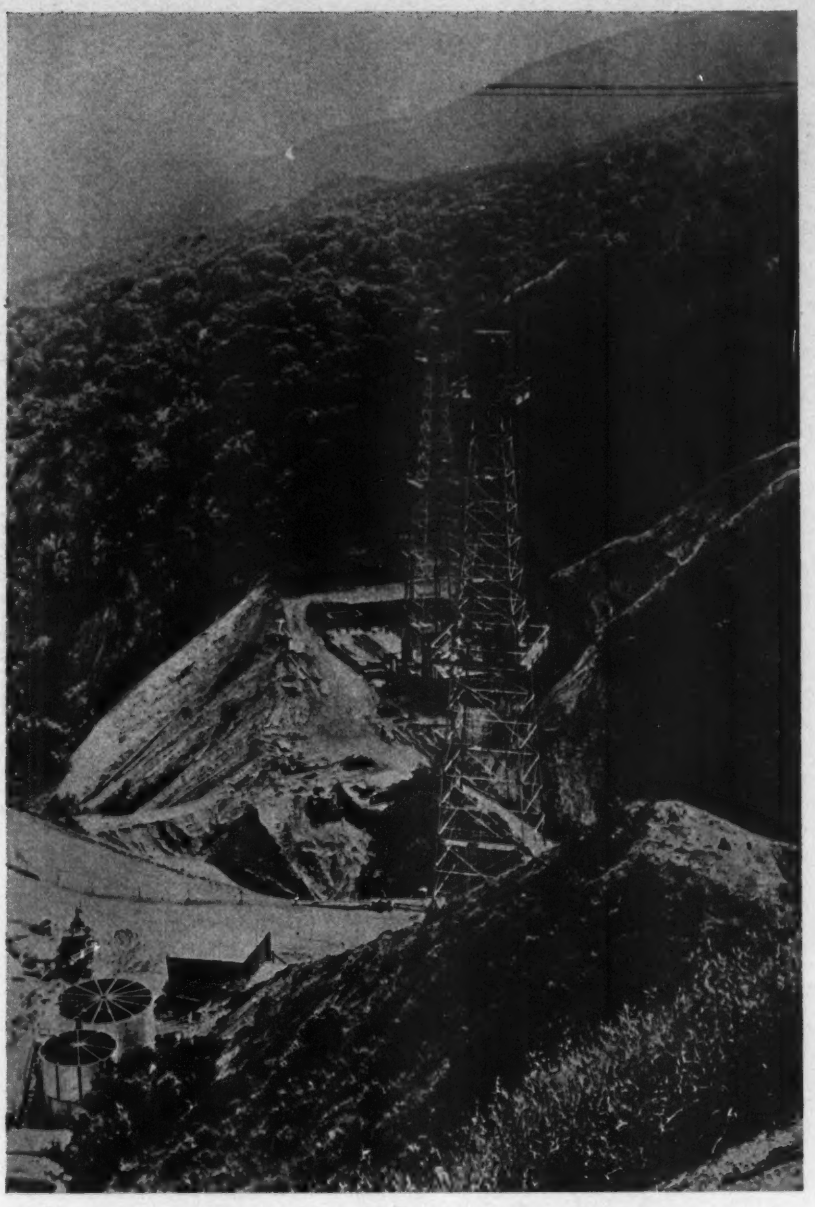
General characteristics of the products currently produced in the Avon alkylation plant are shown in Table 2.

TABLE 2

CHARACTERISTICS OF AVON ALKYLATE PRODUCTS

	Light Alkylate	Intermediate Alkylate	Bottoms
Octane No. (Motor Method)	92.5	83.0	80.0
Reid Vapor Pressure	3.8	....	....
Gravity °A.P.I.....	71.3	56.2	50.6
A.S.T.M. Distillation °F.			
IBP	135	314	396
5%	172	322	404
10%	184	327	408
20%	199	332	412
30%	209	335	420
40%	217	339	429
50%	222	342	442
60%	225	346	460
70%	230	350	484
80%	238	354	516
90%	250	360	560
95%	270	363	610
E. P.	310	390	644
Recovery	98	98	98
Res.	1	1	1
Loss	1	1	1

Cooling water for the plant is furnished by a four cell Schubert-Christie forced draft tower. The forced draft type of tower is particularly well adapted to the Avon operations because windage losses are eliminated which allowed the installation of the alkylation plant on a site close to the main refinery electric power lines. The cooling water circulating system is so arranged that a major part of the water can be circulated through the refrigeration condensers before passing through other coolers where slightly warmer water can be utilized.



No terrain is too scrambled for a profitable Tide Water Associated enterprise. This is Aliso Canyon, and you should see some of the company's locations in Ventura.

The area around the acid reactor system is paved with acid resisting brick laid on acid-proof concrete. This section of the plant drains to acid-proof sewer lines. The rest of the battery area is completely paved with ordinary concrete. All vessels containing acid or caustic mixtures were stress relieved and all piping handling acid or caustic were stress relieved after fabrication.

All centrifugal pumps with the exception of the reactor pumps are electrically driven. A total of 15 steam-driven low clearance reciprocating pumps are provided for handling light charge and reflux hydrocarbons. These steam pumps all operate on 150-lb. refinery steam.

The control room contains all important plant recorder controllers and indicating gauges. A sufficient number of instruments have been provided to give a complete picture of plant operation at all times. The control house is built in two sections, one for the control board and a separate room for the electric

motor switches. The control room also contains sufficient equipment for simple plant control tests, such as: determination of acid and caustic concentration, percentage unsaturated hydrocarbons, as well as boil tests on reflux streams.

The Avon alkylation plant was placed in operation with a minimum of difficulty, and has operated smoothly and efficiently since the initial operation.

U. C. Petroleum Courses Opened in Los Angeles

Of interest to oil engineers and geology students are two new courses which the University of California Extension Division will open on Sept. 17 and Sept. 26 at its 813 S. Hill St. downtown Los Angeles classroom center. The first course is titled "Petroleum Technology" and will feature a study of the history, origin, geology and chemistry of petroleum. Paul F. Devine is the instructor.

The second course, opening Sept. 26 at 7 p.m., is titled "Oil Production Engineering" and will have Glenn H. Bowlus as instructor.

S. F. Bowlby to Coast As Shell Chief Engineer

Effective Aug. 26, S. F. Bowlby, formerly Division Manager for Shell Oil Co., Inc., Iowa, La., was transferred to the Pacific Coast where he takes up his new duties as Chief Engineer, Exploitation, Los Angeles. Mr. Bowlby replaces Bouwe Dykstra who leaves for an assignment with Shell in Colombia, South America.

L. G. Robinson Headquarters In Bakersfield for Security

L. G. "Pat" Robinson, California sales manager for Security Engineering Co., Inc. of Whittier, has recently established his residence in Bakersfield where the Security district headquarters for the San Joaquin Valley is located.

This move places Mr. Robinson on his old stamping ground. Prior to establishing the present district office, he was headquartered there as the Valley manager. After serving the company for some months in this capacity, he went to Illinois as special factory representative. When the company established a district office at Centralia, Pat moved southward to Houston, representing the company in the Gulf Coast area.

When Security's district office was established at Houston, Pat Robinson returned to company headquarters at Whittier where he has been in charge of California sales.

L. G. Robinson

Jud Williamson continues as San Joaquin Valley manager.

To Produce Toluene At Shell Refineries

Toluene, the basic ingredient of TNT, will soon be produced commercially direct from petroleum for the first time in the United States, it was announced today by the Shell Oil Co., Inc. The company will begin construction immediately on a new toluene manufacturing plant at its Houston, Texas, refinery. This plant, which will produce more than 2,000,000 gallons of TNT Grade toluene annually, represents a major step in the direction of adequate production of TNT explosive for National Defense purposes. Hitherto the only source of high quality toluene has been the coal tar by-product industry, which, according to recent announcements of the War Department will be unable to supply the quantities required for the new Defense Program. Since the outbreak of hostilities in Europe petroleum chemists have been working to develop a process for producing a toluene of sufficiently high purity to be used in the manufacture of TNT. Shell Development Co. research organization developed and perfected the toluene process to be employed at Houston. In addition, this organization has perfected a second process, complementary to that used at Houston, and it is understood that by adding this second step, Shell could produce more than 7,000,000 gallons of toluene annually at its Houston refinery alone. Similar plants could also be added at Shell's other large refineries in Illinois, California, and Louisiana. Shell is deferring construction of the secondary process at Houston as well as toluene plants at its other refineries pending congressional action on the National Defense Amortization Bill. Like a number of other companies, Shell naturally hesitates to invest large amounts of capital in plants for the production of war materials unless there is some assurance the investment may be amortized during the period of high demand which is expected as a result of the rearmament program. It is understood that Shell is also ready to build a full scale plant for the production of butadiene, a product which Shell Development has been producing in semi-commercial quantities for the past twelve months. Butadiene is one of the base materials for synthetic rubber. Action in this direction is also dependent upon amortization legislation. The company's modern refinery at Houston was selected as the site of the initial toluene plant because of its ready accessibility to necessary raw materials and markets. The contract for the construction of the new plant at Houston, involving more than half a million dollars, has been awarded to C. F. Braun and Co. of Alhambra, Calif., who will start construction 'at once'.

Bransford Issues New L. A. Basin Map

James C. Bransford is now offering California oilmen a newly revised version of his familiar Los Angeles Basin Oil Field Map. In addition to bringing up to date field data and well locations, he has added idealized cross sections which not only show the producing structures but include key wells both in and between fields. Like other Bransford products, the new edition is large size, suitable for wall mounting. Scale is 1" = 3000' which insures legibility.

After mud has traveled through the drill pipe, bringing cuttings back to the surface, a beam of ultra-violet rays can be focussed upon it, and tiny particles of oil, if present, become fluorescent.

Principal prime mover in the building of farm-to-market roads, tractors have pulled the farmer out of the mud in more ways than one.

L A U G H T H I S O F F

Max Anfenger, one of our best known authorities on such matters, declares that nothing makes the average motorist see red like seeing red.

And he recommends as good safety practice on the highway cutting out the cutting in.

On the other hand, after a powwow with some of his horticultural Glendale neighbors, **Henry Dean** says there is nothing so disgusting as a bunch of gardeners beefing around the bush.

Henry also points out that in spite of their ungainliness, ducks have this commendable characteristic—when the opportunity presents they lose no time in liquidating their bills.

You know of course that a duck is merely a chicken with flat feet.

Now comes **Dick Hoover** with a draft story as follows: The sergeant of the squad had inspected the rifle barrels with one of these reflector devices, and was bawling out some of the rookies for the disgraceful condition of their equipment. "It's all very well for you, sir", protested one outraged private, "You examine them with a microscope, but we have to clean them with the naked eye."

Then there was the cavalry recruit who managed to get the saddle over the horse's head, but couldn't get his forelegs through.

And said the proud father to his ten year old off-shoot, "Lissen, sonny, can you lend me that five dollars I gave you this morning for your birthday?"

Dick Miller, an addict of the miniature camera is simply amazed by developments in the photographic business. Speaking of film emulsion speeds, he declares that he took a picture of a roustabout some time ago with a new type slow speed film, and before he could get it developed the fellow had become a field superintendent.

He also tells us about a fellow minicamaniac who was recently the victim of an appendectomy. Now the poor chap has two diaphragm openings to worry about.

Incidentally, there are no yes men in the photographic profession—the answer is always in the negative.

And we read in the paper the other day that a man, charged by the S.P.C.A. with mercilessly whipping a dog, was convicted by a candid camera photograph showing him in the act. It was snapped by a boy of fourteen—the young whipper snapper.

During the investigation of a stand up fist fight that took place right on the job, the pipeline foreman asked, "And what started the quarrel?" "Well," says the plaintiff, "He ups and calls me a dirty so and so. And how would you like to be called a dirty so and so—just supposin' you wasn't one?"

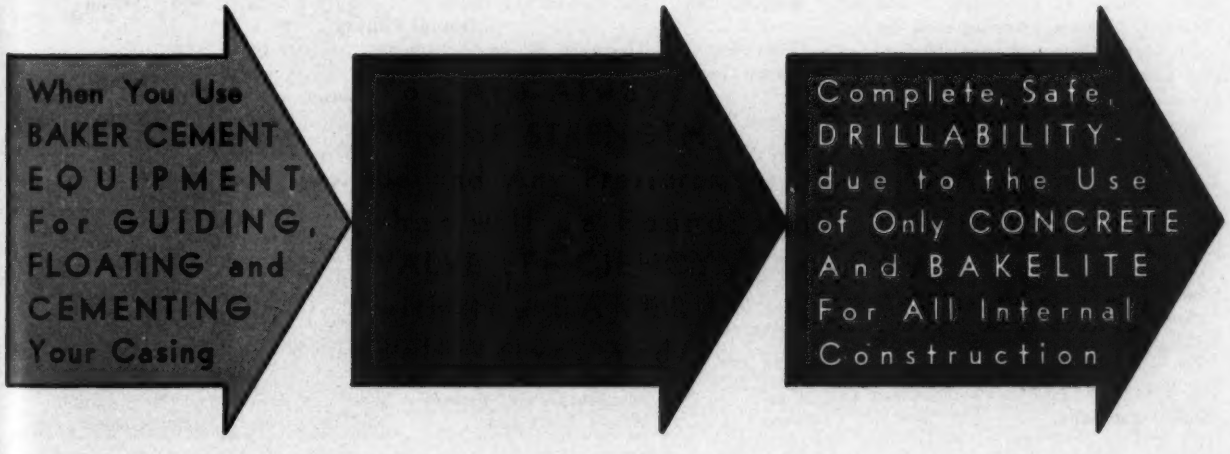
Wherewith we again turn to the war and **Bill Waddell's** statement that many a man who hasn't been in the navy nevertheless knows how to scuttle a schooner.

And there seems to be no question that the food shortage in Europe is becoming acute. Over our private wire comes information this week of an attempt by one of the central powers to trade four generals for a can of condensed milk.

While all Europe is convulsed by war, and the entire world seems gradually to becoming involved, it is a mighty comforting fact that outside of our immediate family the U. S. has done no actual fighting since 1918.

As **Jack Ballagh** has reiterated many times and again repeats, "There would never be any war if we could only get everybody sore about the same thing."

With which few remarks we conclude. Remember, no town has done more to promote peace in America than Reno, Nevada.



Field Development

Los Angeles Basin

Wildcats Scheduled For Athens District

Since the discovery of a productive deep zone in the Athens area of the Rosecrans field, announcements have been made of three attempts to extend the field.

Largest step away from the field is that to be taken by the S. M. Brooks organization which plans to drill a wildcat approximately half way between the Athens field and the El Rey Oil Co. well which was completed several months ago as a small pumper. The Brooks try, to be located approximately 1500 ft. east of Western Avenue and 500 ft. north of 120th St., will be carried to 9000 ft. if necessary to thoroughly prove the O'Dea zone.

Taking up where W. E. Entrikin left off in De Van No. 1 at the southwest corner of 120th St. and Main, Rankin & Williams are preparing to deepen the abandoned 6520 ft. hole in search of an easterly extension of the deep zones.

Closest to the field is Chas. T. McCowin Jr.'s project between Broadway and Main St. on an extension of 131st St. Mr. McCowin is preparing to reenter the old Western Oil & Refining Co. No. 3 and test for production in the upper zones. If good results are not obtained, he then plans to drill deep.

Production in the Athens deep discovery area has not been much to brag about so far. Yield of the Thorley well averages close to 200 bbls. a day, while two blocks southwest, Inca Oil Corp. has not been able to keep its well on steady production. With perforations open from 8063 to 8320 ft., capacity seems to be about 125 bbls. a day.

The next well to try the zone will be Southern California Petroleum Corp.'s Athens No. 12-1A which is currently drilling below 6400 ft.

You are reading the Pacific Coast oil men's home paper.

Rosecrans Outpost Coring For O'Dea

Royalty Service Corp. No. A-W-1, southerly extension well at the intersection of Redondo Blvd. and Main St., is coring for the O'Dea oil sand below 7640 ft. Should this project find good production, it will be immediately offset by St. Anthony Oil Corp. and Thos.

LOS ANGELES BASIN WILDCATS

Area	Well	No.	Section	Depth	Status
Athens	Melrose Pet. Co.	1	12, 3-14		Rig
	Rankin & Williams	1	7, 3-13	6520	Foundation
Castaic	Colter, R. T., Explor.	1	8, 4-17	1338	Idle
	Havenstrite, R. E., Lincoln	1	16, 4-17	6948	Completing
	Worland Oil Co., Jenkins-Owens	1	18, 5-16	2790	Idle
	Nevada Drlg. Co., Domingues Est.	1	31, 3-13	3357	Idle
Domingues, West	Wood-Mellon Oil Co., Wood	1	31, 3-13	7498	Redrilling
Inglewood	Vanguard Oil Co., L.A.I.	1	29, 2-14	1041	Idle
La Habra	Security Land & Water Co.	1	9, 3-10	4800	Drilling
	Union Oil Co., Sansinena	12	31, 3-10	5698	Idle
Malibu	Sovereign Oil Corp., Sovereign-Marblehead	1	00, 00-00		Bldg. rig
Mint Canyon	Redwood Oil Co., Mitchell	2	22, 4-15	985	Idle
Newhall	British-American Oil Prod. Co., Edwina	1	14, 3-16	6196	Idle
	Aztec Oil Co., Sanborn	1	6, 3-16		Location
	Canyon Oil Co., Sanborn	1	6, 3-16		Rig
	Consolidated Pet Co., Needham	4	13, 3-16	4398	Idle
	Creighton Hammon Synd., C.H.	1	17, 3-16	990	Cleaning out
	Irene Oil Co., Kraft	1	31, 4-15		Rigging up
Palos Verdes	Rolling Hills Pet.	1	27, 4-14	6580	Pre. to swab
San Fernando	Casa Grande Oil Co., Lopez-Lundy	1	1, 2-15	3785	Idle
	Continental Oil Co., Howell	2	35, 3-16	5422	Abandoned
	Parry, Geo. G., Moynier-Parry	1	6, 2-14	4216	Idle
West Whittier	Cal. Pico Oil Co., Beach	1	7, 2-11	6490	Drilling
	Orange County				
Costa Mesa	Thompson, Milton N., Banning	1	9, 6-10	5625	Idle
Garden Grove	Bird & Chambers	1	31, 4-10	1250	Idle
	San Bernardino County				
Carbon Canyon	Kipp, George, Inc., Bannon	1	32, 2-8		Pre. to spud.

NORTHERN COUNTIES WILDCATS

County	Well	No.	Section	Depth	Status
Madera	Blake, Thos. M., Arnold	1	22, 10s-17e	3204	Idle
Merced	Don Pedro Oil Co.	1	9, 6s-9e	1610	Idle
Monterey	Loma Grande Oil Co., Corey	1	23, 24s-10e	1868	Idle
	Priest Valley Pet. Co., Greve	1	22, 20s-12e	2885	Fishing
Sacramento	Bishop Oil Co., Wilmar	1	21, 4n-3e	4140	Idle
	Standard Oil Co., Rio Vista State	1	31, 4n-3e	4650	Completed
San Mateo	Ra-Lite Petroleum, Inc., Bell	5	16, 7s-4w	1000	Drilling
Yolo	Standard Oil Co., Typetts	2-1	9, 12n-3w		Location
Yuba	Wright, L. G., Cox	1	18, 14n-5e	1402	Drilling

PROVED *by* FIELD SERVICE

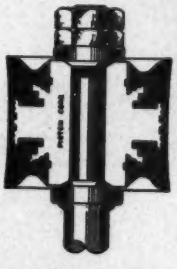
When we introduced the D & M Upset Piston Rod, some months ago, we pointed out the increased strength produced by the process of upsetting these rods.

Now, after months of satisfactory service under the most severe conditions, the advantage of this process is fully demonstrated and proved.

In addition, D & M Upset Rods are easier to handle —only 2 nuts to remove to change piston, instead of having to pull the rod from the pump.

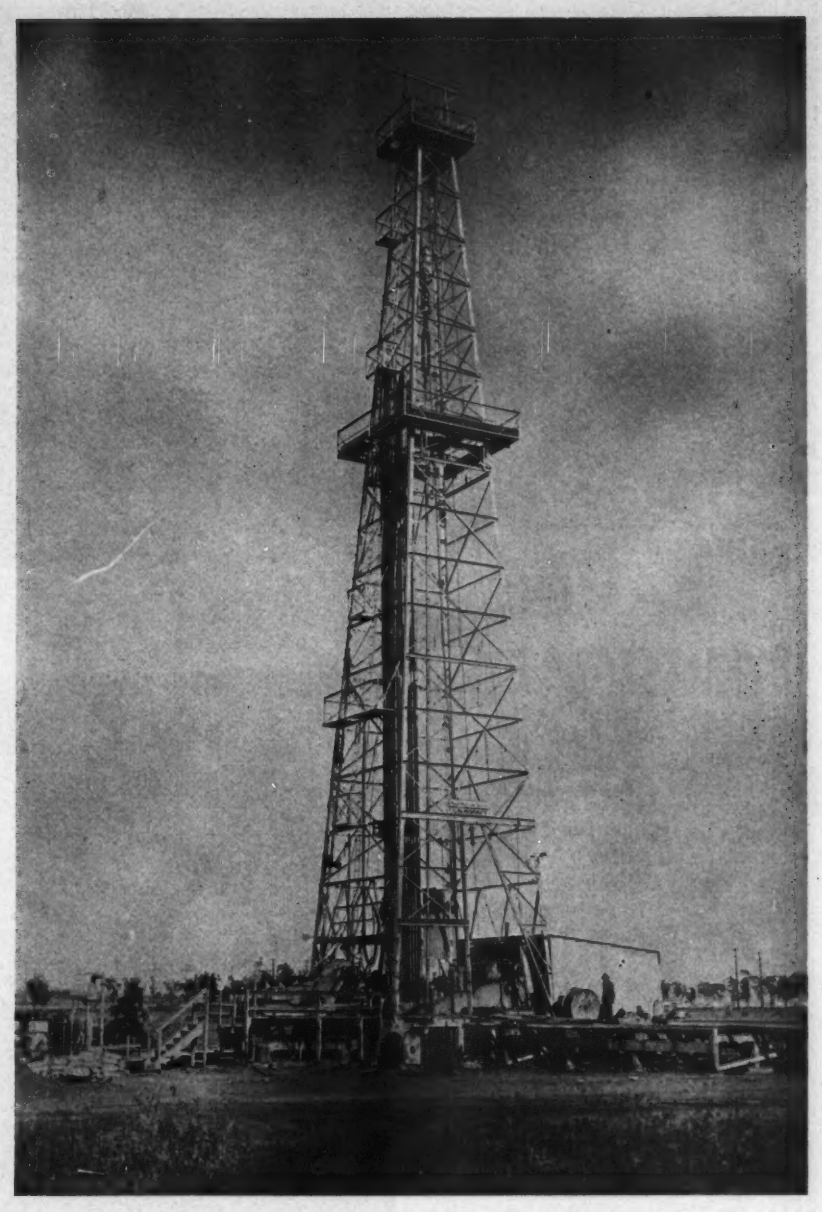
BETTER PISTONS, TOO

Better support for the rubber is provided by a slight change in Core Construction, thus increasing the service obtained from D & M Pistons.



SOLD BY SUPPLY STORES EVERYWHERE

D&M MACHINE WORKS
PISTONS · RODS · LINERS
PIONEERS IN OIL FIELD PUMP REPAIR
TORRANCE, CALIF.
BRANCHES
HOUSTON · OKLAHOMA CITY



Undaunted, Wood-Mellon's G. B. Wood No. 1, continues to probe a new section of underground Dominguez.

Kelly & Sons both of whom are watching developments closely.

On the west side of Main St. near Compton Blvd., St. Anthony finished Gordon No. 4 at 7825 ft. flowing at a rate estimated to be at least 1200 bbls. a day. The O'Dea sand is open below 7542 ft.

Completion of Mission Oil Corp. Pierce No. 1 in the Zinns zone for 1,500,000 cu. ft. of wet gas and 50 bbls. of high gravity oil has given new impetus to development in the San Pedro Ave. section of the field. North of Mission, Midfield Oil Co. is drilling Murdoch No. 1 and south of Redondo Blvd. Crest Petroleum Co. is fishing for drill pipe preparatory to making further tests. The Chicago well is temporarily idle.

Most northerly of the newly drilled group is Southern California Petroleum Corp.'s Maxwell Comm. No. 13 which bottomed at 7592 ft. and completed flowing 300 bbls a day. The company's Van Nuys No. 1 in the same area is fishing with bottom at 7665 ft.

An interesting well is Union Oil Co.'s Rosecrans No. 43 which soon will be testing the Zinns zone. Located west of Broadway and north of the area believed productive in the O'Dea, the project cemented 5½ in. casing at 6105 ft.

YOU

- lose it

WE'LL

fish it out

THE

CAVINS

AUTOMATIC

HYDRAULIC SUCTION

BAILER

with Junk Basket and By-Pass

.....is *unequalled*

for fishing out moveable junk such as cones, cutters, slips, millings, packer rubbers, etc.

It will do the job more thoroughly, in less time, and for less money, than any other method.

Cased or open hole, it makes no difference. And as for depths—we just completed a bang-up job taking out a drilled-up cement retainer and a bridging plug in an 8,400-foot well filled with 76-lb. mud.

There may be a fishing job waiting 'round the corner for you. We'd like to have you consult us if and when it comes up.

The CAVINS Co.

2853 Cherry Ave., Long Beach, Cal.
Telephone 414-14

BAKERSFIELD	Telephone 1779
TAFT	Telephone 780
VENTURA	Telephone 6767

Eastern Sales and Rental Offices

ODESSA: CORPUS CHRISTI: HOUSTON: KILGORE: LAKE CHARLES: WICHITA: HOISINGTON: SEMINOLE: DENVER: LANCE CREEK

Offsetting Thorley's deep test at Athens is So. Calif. Petroleum's Comm. No. 12-1A. Members of the Thos. Pike crew are: Jack Thomas, W. H. Landon, George Birt, George Winterburn.

Cleaning out Book No. 1, Athens, are W. H. Bowen, Guy Bowen and L. G. Brumage.

Hathaway Project Marks Coyote Limit

Hathaway Co's. Johnson No. 4, located north of Golden Ave. and 600 ft. west of Valencia Ave., appears to mark the limit of East Coyote Lemke zone production in that direction. No producible sands were found to 4282 ft. and the hole plugged and casing set near the 3400 ft. level to test the Anaheim zone.

Faith in the old upper horizon was recently justified when Bryan Pacific Oil Co. Wallop No. 1, a failure in the 4200 ft. zone, was plugged and perforated from 3200 to 3240 ft. resulting in a 140 bbl. completion. Gravity of the product was 18 and the cut not over 5.0%. Wallop No. 1 is located west and south of Master Petroleum's Co.'s good wells.

Important to the future of the area is Barth Oil Producers No. 1 on the Queyrel property at the southeast corner of Valencia and Golden. Progressing slowly, bottom is not much over 1000 ft.

Metro Petroleum Co's. No. 1, most northwesterly of the present crop of drillers is near the 3500 ft. level, while

With a natural gasoline plant and the Inglewood race track and the Potrero Golf Club all around, drilling at Tide Water's Cypress No. 3, should have few dull moments.

Don Angle's East Coyote Oil Co. No. 1 is making hole below 1500 ft.

Master Petroleum Co., departing from its practice of redrilling old wells, is planning to start a "grass roots job" on the Basten property soon.

You are reading the Pacific Coast oil men's home paper.

Dominguez Well Cores Seventh Callender Zone

Indications are strong that R. E. Havenstrite will get another good well in Larronde No. 4 which is coring oil sand in the Seventh Callender zone at 7095 ft. No. 4 is on location west of No. 2 and is lower on structure than its predecessors.

Gibraltar Drilling Co. Dasteel No. 1 which pumped a small quantity of oil and emulsion from the Eighth Callender zone perforated opposite the Sixth and Seventh zones but did not improve the yield.

Union Oil Co. added two more to its

See--

ROYAL'S NEW NUMBER 1

GIVE IT THE

DESK TEST

ROYAL TYPEWRITER COMPANY, INC.

1031 South Broadway Los Angeles, Cal.

Telephone PRospect 9224

Just Say---

YES! You may send me the CALIFORNIA OIL WORLD for one year, for which I enclose $1.00.

For Foreign Countries, $2.00

Name _____

Address _____

City _____ State _____

Position _____ Company _____

Check branch engaged in Producing..... Refining..... Natural Gasoline..... Marketing..... Manufacturing

Subscriptions accepted only from persons actively connected with the oil industry.

California Oil World, 714 W. Olympic Blvd., Los Angeles

SIMMONS

WE CLEAN

• TANKS •
• SUMPS •
• PITS •
COOLING TOWER
• BASINS •

AND

ANY OTHER PLACE THAT COLLECTS SLUDGE, MUD OR RESIDUAL OILS.

ALL WORK DONE BY EXPERIENCED CREWS, USING SPECIAL VACUUM EQUIPMENT BUILT FOR QUICK, THOROUGH CLEANING.

MODERATE RATES WITH MAXIMUM SERVICE

CALL

THOS. W. SIMMONS
TANK SERVICE DIVISION
555 So. FLOWER
LOS ANGELES, CALIF.
VAndike 6134
LONG BEACH . . . 673-457
24 hour telephone service
at
Redondo Beach . . . 2209

Drilling Tide Water's Cypress No. 3 are C. Z. Yonge, C. M. Davis, C. Marshburn and R. N. Frantz.

long list of good Dominguez wells when it completed Callender No. 78 and Austin No. 4. Both wells flowed 600 bbls. a day through restricted beans on initial tests.

Newhall-Potrero Well Initials Over 1300 Bbls.

With initial gauges bettering the 1300 bbl. mark, Barnsdall Oil Co. completed its 12th producing well on the Rancho San Francisco property at Newhall-Potrero. Hole was bottomed at 7390 ft. and the 8⅝ in. water string was set over the First zone at 6343 ft. Accompanying the flow of 34 gravity crude was 800,000 cu. ft. of gas.

The company's No. 13 is coring for the First zone while preparations are being made to spud No. 14.

East of the producing area, Newhall-Potrero Oil Co. is drilling below 7900 ft. after topping the Modelo at 7400 ft. No oil sand has been reported.

T.W.A. Completes Potrero Project

Tide Water Associated Oil Co. recompleted Cypress No. 3 for 500 bbls. after deepening to the Willis sand at 5750 ft. Only 45 ft. of formation is open, the 5¾ in. water string being cemented at 5705 ft.

In the Prairie Ave. townlot area, Beloil Corp. is deepening Castleberry No. 1 below 7000 ft. Reports indicate the well will be a deep test.

Geo. Kipp Spuds Chino Wildcat

Geo. Kipp, Inc., has just spudded in a well offsetting E. F. Stella's McDermont No. 1 in the hills five miles southwest of Chino. Bottomed at 1110 ft., the Stella well is pumping water with a small amount of oil. It is said that faulty casing is responsible for the water condition and that when first on the pump, oil production was 15 bbls. per day.

In the same area, Stella is drilling Kreamer-Bachs No. 2 below 4200 ft. This well was spudded in with cable tools but is now using rotary equipment.

Nevada Drilling Suspends West Dominguez Wildcat

Finding the 3200 ft. sand body devoid of oil and gas, Nevada Drilling Co. suspended drilling operations in its test well at the southeast corner of Victoria Ave. and Main St. Bottom is 3357 ft.

Wood-Mellon Oil Co. is redrilling its exploratory hole at the corner of Figueroa and Victoria. New bottom is 4200 ft.

Pico Wildcat Nears Miocene

Cal-Pico Oil Co.'s wildcat, Beach No. 1, is becoming of increasing interest as it nears the top of the Miocene. Last reported as drilling at 6525 ft., microfauna indicated the formation was basal Pliocene. The well is located on Durfee Road half a mile north of Beverly Blvd.

San Joaquin Valley

Strand Vedder Try Is Again Drilling

Delayed by a drill pipe fish, Tide Water Assoc. Oil Co.'s KCL No. E-27-7, deep test in the Strand field, is again making hole below 6600 ft.

The current well is an attempt to find Vedder zone production in another of the central Valley fields. The Vedder proved prolific at the nearby Greeley and Rio Bravo fields, and it is thought probable that a similar sand body is underlying the present productive Stevens zone.

Honolulu Digging B. V. Basement Try

Honolulu Oil Corp.'s No. 25-P, deep try in the old Buena Vista Hills field, was last reported in hard brown shale with streaks of tight gray sand which showed no cuts at 7565 ft.

Located in sec. 10,32-24, the well is an avowed test of all formations to basement, unless of course substantial production is encountered which would make continued drilling unnecessary.

There is a possibility that this well is located high enough on structure to permit production in the Stevens zone, a goal to which many wells drilled on the flats below have aspired. The wells drilled in and near the lake bed at the foot of the hills field have, without exception, encountered Stevens sands but all found it too tight and too low to be productive.

North Coalinga "Cat" Finds Kreyenhagen Low

Tide Water Assoc. Oil Co.'s Standard Investment No. 1-6B, bottomed below 8150 ft. near the northwest corner of sec. 6,19-16, is proving materially lower than expected.

Located two miles north of the Coalinga Northeast Pool, the test found the top of the Kreyenhagen shale near 7600 ft. Figuring the thickness of the shale body to approximate the normal, which would be a minimum of 1000 ft., the top of the Gatchell zone would be 8600 ft., which is 300 ft. below the water level in the sand.

With nearly all hope for production in this hole gone, barring irregularities in the structure, drilling is being continued to establish the presence of sand bodies and locate the limits of the shoreline which controls production in the field to the south.

Finding wet sands present at this location, the operators could move westerly for another try, since the formations rise substantially toward the west. Failure to find sands would permit drilling even closer to the field in an attempt to get within the limits of the trap.

Knowledge gained from this hole will materially benefit the operators in further exploration in this area.

Trico Oil & Gas Finds Round Mt. Production

Benefiting by two previous failures at finding Vedder zone production in the northwest quarter of sec. 8,28-29, Trico Oil & Gas Co. finished its third attempt as a good pumper.

The dusters, Coffee Nos. 1 & 2, were drilled approximately 1500 ft. apart, while the third and successful try, Coffee No. 3, was drilled between them. The wells were drilled along the Coffee Canyon fault, against which Crestmont Oil Co. produces 9 wells in the southerly portion of the section.

Crestmont's further interest in the same area, is evidenced by the taking over of a 70 acre parcel in the east half of the northeast quarter of the southerly adjoining section 17. The Bass & Goodknight interests, from whom Crestmont acquired drilling rights, retain the most northeasterly 10 acres of the piece, upon which they operate three wells under the name Tampico Oil Co. It is believed that Crestmont will start drilling this acreage within two weeks.

A southerly Round Mountain outpost, Spartan Oil Co.'s Hiatt No. 1, is idle at 2085 ft. after losing a drill pipe fish.

Four Finish Under Wraps In Rio Bravo Oil Field

With drilling activity continuing unabated, four substantial completions were marked up for the Rio Bravo field during the past week.

Superior Oil Co.'s Osborn No. 1-1, found to be the highest well in the area when the Rio Bravo sand was marked at 11,090 ft., was finished through a 30/64 in. bean flowing a 1565 bbl. rate. The 39.9 gravity clean oil came with 2,420,000 cu. ft. of gas and carried 1750 lbs. pressure on the tubing and 1975 lbs. on the casing.

At the southwest flank of the field Pasadena Realty No. 1 was finished by Superior flowing 1480 bbls. of 38.8 gravity oil through a 30/64 in. bean. Pressures and gas volume were substantially the same as in the Osborn well.

The third of the completions was also marked up by Superior when Rudnick No. 3 initialed 1500 bbls. on a 4 hour gauge. Like the other wells, gravity and pressures were high and the gas

SAN JOAQUIN VALLEY WILDCATS

Area	Well	No.	Section	Depth	Status
	Fresno County				
Cantua Creek	The Texas Co., Everding	1	24, 17-15	7029	Drilling
Coalinga	Classen, W. J. & Assoc.	1	1, 21-14		Grade
	Lewis, C. H.	1	18, 21-15	2298	Idle
	Section 30 Oil Co.	8	30, 19-15	1238	Idle
	Tide Water Assoc. Oil Co., Guardian	23	2, 20-15	3731	Pumps water
Jacalitos Hills	Continental Oil Co., Kreyenhagen	1	4, 22-16	9240	Drilling
Mendota	Jergins Oil Co., Cheney Ranch	1	29, 14-13	9345	Prep. to retest
	Kern County				
Belridge—South	DeLanty & Sutton, Trustees	1	28, 28-22	3020	Idle
	Santa Mora Oil Co.	1	10, 28-20		Material
Devil's Den	Seaboard Oil Co., Beer	66	17, 26-19	6759	Drilling
	Trigg, H. C.	1	11, 25-18	693	Completed
	Trigg, H. C.	2	11, 11-11	841	Bailing
Edison	Goodrum & Vincent, Inc., S.P.	6	31, 29-30	510	Completed
	Goodrum & Vincent, Inc., S.P.	7	31, 29-30		Location
Grapevine	Kern Line Oil Co.	1	19, 11-19	4650	Drilling
	Richfield Oil Corp., Tejon Ranch	1	2, 10-19	7023	Stdg. cemented
Mt. Poso	Crestmont Oil Co., Smith	1	11, 26-27	450	Drilling
	Signal Oil & Gas Co., c/o Dwight G. Vedder, V-S. Glide	1	29, 27-28	2314	Completed
Round Mountain	Spartan Drlg. Co., Hiatt	1	32, 28-29	2085	Idle
	Trico Oil & Gas Co., Coffee	3	8, 28-29	1400	Completed
Shale Hills	Scotia Exploration Co., Abbott	1	7, 27-19	2047	Idle
Wheeler Ridge	Richfield Oil Corp. KCL	2	28, 11-20	7102	Drilling
	Tulare County				
Trico	Tide Water Assoc. Oil., Daniels	35	22, 24-23	11728	Plugged 3134

was nearly two and a half million ft. The orifice in this case was a ½ in. tubing bean.

Union Oil Co. brought in Kernco No. 2-34 for a 1491 bbl. rate through a 22/64 in. bean. The 38.9 gravity oil was accompanied by 1,580,000 cu. ft. of gas under 800 lbs. tubing pressure and 750 lbs. casing pressure.

Finished and flowed through small orifices, these wells are typical of Rio Bravo completions which in no way reflect their true potentials. Initialing merely hundreds of barrels, their actual capacity would probably be rated well into the thousands of barrels.

Richfield Scores In Coles Levee Finish

The intensive Coles Levee drilling program which Richfield Oil Corp. aimed at bolstering its company owned reserves is consistently yielding additional completions. Latest to be added to the company's already impressive list of flowing wells is KCL-A No. 18-29 which was finished for a 1400 bbl. rate from 8980 ft.

At the time the rate was taken the well was cutting 16% drilling mud and had a consequent wet gravity of only 33.4.

Taking the lead in California drilling activity, Coles Levee now has eighteen strings of tools at work, all but three of which are operated by Richfield or by contract for them.

The exceptions are Ohio Oil Co.'s two strings and the outfit which Standard Oil Co. is running in sec. 9,31-25.

Deep Wasco Well Cores For Sand

At present the only operator in the deep Wasco oil field, Pacific Western Oil Co. is nearing the finish of Meyer No. 1. . A westerly extension to existing production in sec. 7,27-24, the well is coring for the A-2 sand from depth last reported as 13,076 ft.

R. S. Lytle Finishes Coalinga Eocene Well

Latest completion in the Coalinga Eocene area was Robert S. Lytle, Operator well No. 57-18F. Located near the south quarter corner of sec. 18,20-16, in the southerly portion of the field, the well made 2386 bbls. of clean 31 plus gravity oil through a 23/64 in. orifice. The gas flow was metered at 1,545,000 cu. ft. while tubing pressure was 1000 lbs. and casing pressure was 1400 lbs.

Lytle is at present running 4 strings of tools here and Standard Oil Co. is operating a like number.

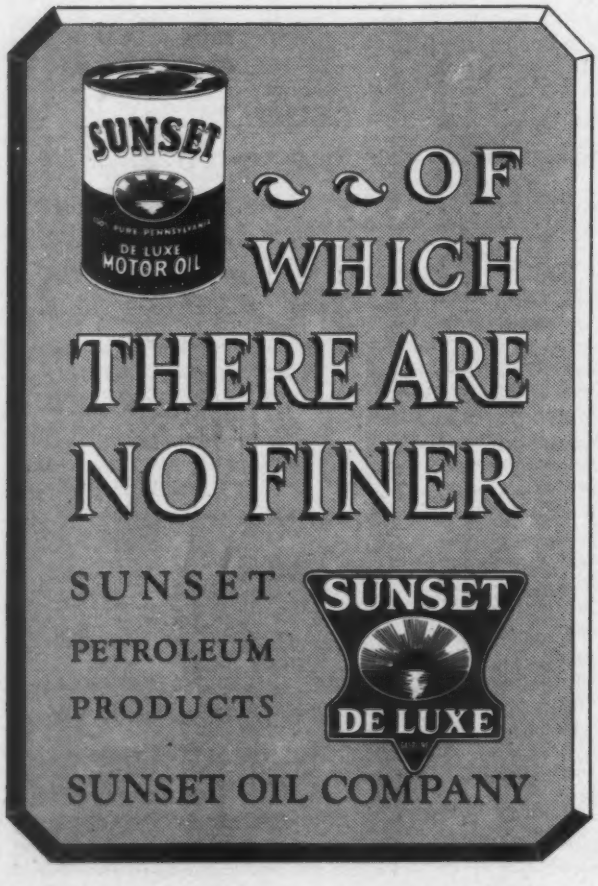
At the extreme north edge of the presently proved area, Superior Oil Co. is below 5500 ft. with Cagle No. B-4.

On a 5 acre parcel near the east limits of the field, E. L. Cord's well No. 1 was last reported drilling at the 5000 ft. level.

Amerada Completes No. Coalinga Well

In the northwest corner of sec. 17,19-16, at the north edge of Coalinga Northeast production, Amerada Petroleum Corp. has finished S.P.L. No. 1-17B from 8288 ft.

Bottomed in gray sand at 8308 ft., and with a full string of 5½ in. casing cemented at 8296 ft., the hole was cleaned out to 8288 ft. With 4 holes shot in the interval 8170-8174 ft. and 2 in. tubing hung at 8144 ft., the well was finished for 1680 bbls. through a 35/64 in. bean. Gas volume was measured at 925,000 cu. ft. while the 27.5 gravity oil came with



KEEP YOUR MUD SHAKERS
VIBRATING
WITH DEPENDABLE, RUGGEDLY BUILT
TROJAN STEAM TURBINES

Especially Designed For Operating Mud Shakers

Battery of Trojan Triple-Stage Steam Turbines installed on record-depth well.

OPERATE ALL TYPES OF VIBRATING MUD SCREENS

Governor set at factory for 2500 R.P.M. regardless of steam pressure. Reaches full speed in about 10 seconds, thus greatly prolonging life of screen cloth. Rotor is one-piece bronze casting with vanes cast integral, eliminating inserts. Send for bulletin and specifications.

LIGHTNING M SERVICE
MEDEARIS Oilwell SUPPLY CO.
8638 OTIS STREET, SOUTH GATE, CALIF.
JEfferson 7285
BAKERSFIELD AVENAL VENTURA

935 lbs. tubing pressure and 1165 lbs. casing pressure.

Top of the Kreyenhagen here was 7181 ft., top of the Gatchell at 8173 ft. and the gray sand at 8267 ft.

Amerada has graded for S.P.L. No. 37-17B near the center of the southwest quarter of the section. This will be the company's tenth well in the field which it discovered nearly a year and a half ago.

Ten other strings, representing eight companies, are operating in the yet small producing area. Main center of activity is in and near sec. 30,19-16, where this field and the Coalinga Eocene field are thought to be connected with a narrow neck of productive sand.

Mt. View Try Goes On Hook

Drilled through unpromising formation to 5914 ft., plugged to 5685 ft., where a formation test recovered only 20 ft. of mud, is in brief the case history of Columbia Oil Co.'s Crawford No. 1.

Located in sec. 19,30-29 in the Mountain View field, the well found barren sands in the Nichols zone at 4400 ft., the Santa Margarita at 5675 ft., and is now being officially abandoned.

Western Gulf Nears Paloma Oil Sand

In the three well Paloma field, at the southeast edge of the Buena Vista Lake area, two strings are at work.

Ohio Oil Co. is below 9100 ft. in its second well, KCL-B No. 3-23-3, on a 160 acre lease in the discovery section 3, 32-26.

East of its original strike in section 3, Western Gulf Oil Co., co-operating with The Texas Co. on the play, is drilling its third well, KCL No. A-34-2, below 10,119 ft. Objective Stevens sand should be found within two hundred feet.

Shell Finishes Slim Hole Well

In its wholly controlled Ten Section field, Shell Oil Co. finished its slim hole well, KCL No.A-32-30 for an open flow initial of 2196 bbls.

Drilled to 8236 ft. in sec. 30,30-26, and with 4½ in. casing cemented at 7930 ft., 3½ in. perforated liner was landed on bottom and 2 in. tubing hung at 7906 ft. The well was finished in only 29 days elapsed time.

Shell is drilling 4 other wells in the field and has provided locations or rigs for an additional 4 projects.

Jergins Prepares To Re-Test Wildcat

Jergins Oil Co's. Cheney Ranch No. 1, which yielded only fair promise in all prior trys, is about to be tested again. Originally drilled to more than 9000 ft., where bottom sands proved valueless, and redrilled to its present effective depth of 7200 ft., the well has tried all sand bodies which offered possibilities, the best being those at the 7000 ft. level. These sands so far have proved too tight to yield any great quantity of either fluid or gas.

Located in the Mendota area of Fresno county, in sec. 29,14-13, the well was the first to be drilled in the immediate vicinity.

Cantua Creek Try Drills In Temblor

Latest attempt to establish production in the Cantua Creek district of Fresno county is The Texas Co.'s Everding No. 1 in sec. 24,17-15, now in the Middle Temblor at 6880 ft. The current try is looking for production which was suggested by the showings of the company's recent deep test S.P. No. 1.

Gotkool
WATER CANS
& COOLERS
GOTT Water Cans are the practical way to keep drinking water cool for long periods, protected from impurities and always handy to the job. Snug fitting large removable top, strongly built to withstand rough usage. GOTT Water Coolers have extra large covers and a handy non-leaking push button faucet. Your Supply Store has them, get one today! . . . . .
Gott
GOTT WATER CAN
H.P. GOTT MFG. CO.
WINFIELD KANSAS
KEEP PURE DRINKING WATER ALWAYS HANDY

Safety Emblems, Watch Fobs and Medals

Help sustain safety interest by awarding Safety Emblems for various lengths of "no lost time" service. They instill the competitive spirit so necessary to insure employee cooperation. Also Service Award Emblems, Watch Fobs, Medals, etc. Above illustrations show a few designs now being used by leading companies.

Write today!

METAL ARTS CO., INC.

DEPT. 14, ROCHESTER, N. Y.

Coastal District

Ohio Oil Quits Santa Maria Area

To devote its energies more efficiently to the San Joaquin Valley, Ohio Oil Co. recently completed a deal with Union Oil Co. whereby the latter acquired all Ohio's interests in the Santa Maria Valley. Involved were three leases and four producing wells.

During 1937 and the first part of 1938, Ohio Oil Co. drilled three wells on the Joseph Moretti parcels totaling 120 acres in sec. 21,10-34. All were finished at depths above 4260 ft. and all were pumpers in the 250 bbl. class. Morrison No. 1, located on the north 80 acres of the sw¼ of sec. 27, was the company's last operation in the field. Completed at 5195 ft. in May of 1938, initial yield was 500 bbls. of 14.5 gravity oil. There is room for many more wells on each property should demand for this type of crude improve.

Included too were lots No. 100 and No. 105 of Rancho Guadalupe which Ohio leased from Joseph Moretti. These lots adjoin and form a strip two miles long and half a mile wide immediately west of Union Oil Co.'s LeRoy lease. LeRoy's No. 4, most westerly producing well is less than half a mile from this property.

The new owner has announced no plans for development work.

Bolsa Chica Plans Coal Oil Pt. Well

Bolsa Chica Oil Co. is planning to start a new well on its famous Tideland Permit No. 191 at Coal Oil Point east of Elwood on the coast of Santa Barbara county. The new hole will be drilled from the same caisson from which the previous trys were made and will be directed to an unexplored portion of the state permit.

Last operator to attempt a commercial discovery on this play was South Crude Oil Co. of Long Beach which directionally drilled to 4183 ft. and abandoned in July of 1938, without finding the objective Vaqueros which should have been topped much higher.

Wright Drilling In Yuba County

L. G. Wright is below 1500 ft. in well No. 1 near the east quarter corner of sec. 18,14n-5e in the southerly tip of Yuba county, southeast of Marysville.

In the Rumsey Hills area of Yolo county, Standard Oil Co. has located Typetts No. 2-1 in the southeast quarter of sec. 9,12n-3w for a test of Cretaceous horizons.

Activity in the La Honda area of San Mateo county is represented by Ra-Lite Petroleum, Inc.'s Bell No. 5, last reported drilling at relatively shallow depth.

Don Pedro Oil Co.'s well No. 1, in the Newman area of Merced county, is idle at 1610 ft.

Santa Rita Test Finds Conglomerate

Tide Water Associated Oil Co.'s Souza No. 1, located in the Santa Rita Hills east of Lompoc, was abandoned at 3520 ft. in Sespe. Vaqueros was topped at 3185 ft.

South Mt. Well Stages Blow-out

California Securities Oil Co.'s Scheifferle No. 1, easterly South Mountain outpost, created something of a furor when at 3400 ft. it staged a small blowout. Circulating oil was blown from the hole at a lively rate for a short time before being brought under control. Drilling is now under way with bottom below 3450 ft.

On a site adjacent to California Securities, Comstock Petroleum Co. is preparing to drill a new well.

Temulac Redrills Shiells Canyon Well

Only active project in the Shiells Canyon field is Temulac Oil Co.'s Calumet No. 6 which is redrilling at 3000 ft. Calumet No. 8 which was deepened to 4075 ft. by Consolidated Petroleum Co., is pumping mostly water to the sump. Santa Clara Petroleum Co. is planning to drill a new well in the near future.

The producing horizon in the Shiells Canyon field is the non-marine Sespe formation in which production is apt to be quite spotty.

Union Completing Santa Maria Well

Union Oil Co. is completing LeRoy No. 5 in the westerly portion of the Santa Maria Valley field after plugging off the bottom of the hole. Top of the Monterey was encountered at 5575 ft. and some oil sand was cored from above that point to the top of the Franciscan schist. Total depth of the well is 5721 ft.

Fred E. Cole's Tognazzini No. 1, sec. 20,10-34, was abandoned in schist at 4386 ft.

Union Oil Co.'s Betteravia wildcat, Pezzoni No. 2, is coring near the 7400 ft. level. It is believed that no Monterey has yet been found.

COASTAL COUNTIES WILDCATS

Area	Well	No.	Section	Depth	Status
Santa Barbara County					
Betteravia	Union Oil Co., Pezzoni	2	33, 10-35	7383	Drilling
Elwood	Bolsa Chica Oil Co., Permit 191	7	24, 4-29		Location
Santa Rita Hills	Tidewater Assoc. Oil., Souza	1	12, 6-33	3462	Drilling
Summerland	Barnato Group, The, Hyland	1	16, 4-26	3277	Idle
San Luis Obispo County					
Elkhorn	Calif. Pet. Prod., Irons	1	19, 10-24	2527	Idle
Huasna	Tex Harvey Oil Corp., Gilmore Comm.	1	11, 32-14		Rigging up
	Superior Oil Co., Tar Springs	1	24, 32-14	5334	Drilling
Ventura County					
Bardsdale	Elkins, Reed	1	5, 3-19	685	Drilling
	Hopland Oil Co.	1	1, 3-19		Grade
	Westoil Corp.	1	6, 3-19	350	Drilling
Conejo	Sulphur Springs Oil Co., Janss	1	33, 2-19	4526	Idle
Ojai	Seaport Oil Corp., Arnett	3	15, 4-21	1990	Prep. to deepen
	Norwood Oil Co., Coronet	2	17, 4-21	1165	Fish Liner
	Norwood Oil Co., Coronet	3	17, 4-21		Grade
	Per-Col Oil Co., Anlauf	6	21, 4-21	1800	Fishing
Santa Susana	K. C. Oil Co., Marr	1	32, 3-17	1716	Idle
Sespe	English, L. A., Lankershim	4	13, 4-9		Location
	G. E. Development Co.	7	13, 4-19	895	Idle
	Merchants Pet. Co., Cochrane	8	1, 4-20	2805	Prep. to pump
	Riley, Irene Bureon	1	18, 4-19	1998	Drilling
	Rio Hondo Oil Co., Cosby	1	14, 4-19	1695	Idle
	Signal Petroleum Co.	7	13, 4-19	895	Idle
South Mountain	Calif. Securities Oil Co., Schieferle	1	17, 3-20	3460	Drilling
	Comstock Pet. Co.	1	17, 3-20		Rigging up

Loma Grande Resumes Monterey Exploration

After a short period of idleness, Loma Grande Oil Co. resumed drilling its Corey No. 1 in the Bradley area of Monterey county. Located in sec. 23,24-10, the well was last reported drilling at 1860 ft. with occasional showings.

Independent Land Co. of Hollywood has announced its intention of starting a well soon in the same district.

In Priest Valley, Priest Valley Petroleum Co. is fishing for drill pipe which stuck at 2725 ft. while reaming to bottom at 2885 ft. The well is in sec. 22, 20-12.

Superior Huasna Below 5350 Feet

With almost a continuous ditch showing in the last few hundred feet, Superior Oil Co. is drilling and spot coring its Tar Springs Ranch No. 1 below 5350 ft. Though data is closely guarded by the company, it is understood that the formation is the familiar hard brown shale found in other Huasna Valley wells and that recently fractures in the shale have contained heavy oil.

Tex Harvey Oil Corp. is preparing to drill in sec. 11,32-14 on the large Gilmore leases.

Cranberries, graduated from the laboratory recently, came out with a product worth $80 an ounce! Chemists call it "ursolic acid." This hitherto rare, emulsifying agent which helps to make oil and water mix, is derived from cranberry skins.

Exploration of the ruins of Babylon have revealed inscriptions, somewhat boastfully posted by Nebuchadnezzar, that he had paved the streets of the city and of the palace grounds with asphalt. The paving was still there when the archaeologists arrived!

More Valley

New Area Proved Near Mount Poso

Near the south quarter corner of sec. 29,27-28, two miles west of Mt. Poso production, Dwight G. Vedder and Signal Oil & Gas Co. have finished V-S-Glide No. 1 pumping 120 bbls. of 16 gravity oil. Bottomed in Vedder sand at 2314 ft., the well has uncovered another of the usually small pools for which the area it noted. This is the first well to find Vedder production below the 900 ft. sub-sea level.

Crestmont Oil Co. is attempting another such play by drilling Smith No. 1 in sec. 11,26-27, northwest of Dominion Pool production.

Goodrum & Vincent Finish Edison Pumper

Scoring small, shallow production in the northwest corner of sec. 31,29-30, three miles northeast of Edison field limits, Goodrum & Vincent finished S.P. No. 6 at 510 ft. for 12 bbls. daily of 13 gravity clean oil. The operators are planning well No. 7 on an adjacent location.

Continental Oil Deep In Jacalitos Wildcat

With news concerning bottom formations conspicuous by its absence, Continental Oil Co.'s Kreyenhagen No. 1 continues the search for deep production in the Jacalitos Hills.

Last reported at 9220 ft. in unclassified shale, the well is probably approaching the base of the Kreyenhagen shale.

Drilling near the Jacalitos fault, in sec. 4,22-16, the objective is the Eocene sands comparable to those produced in the nearby Kettleman and Coalinga fields.

New tire chains have borium studs nearly as hard as diamonds.

No. 8D JENSEN Unit. 1200' well. ⅝" rods. 2" tubing. 30" stroke. 200 barrels of fluid every 24 hours. 3 h.p. Westinghouse electric motor. You can expect unusual economy from JENSEN Jacks on wells of any depth, producing any amount of fluid through tubing of any size.

Something Else about

JENSEN JACKS

Tires on the car of a good, steady, dependable driver often last twice as long as tires on the car of a jerky, jumpy, nervous driver.

JENSEN Jacks are good drivers, if you know what we mean. Other well equipment lasts longer and requires less maintenance because the unit is smooth and dependable.

For other interesting, money-saving facts about JENSEN JACKS, get in touch with . . .

A. V. TURNER
California Representative
Box 642 Huntington Park

JENSEN
BROTHERS MANUFACTURING CO.
"The House that Jacks Built"
Coffeyville, Kansas, U. S. A.

EXPORT OFFICE: 50 Church St., New York City

HOWARD SUPPLY

Service All Hours
We Never Close

OIL WELL SUPPLIES

•

REPUBLIC CASING
TUBING
LINE PIPE

•

5125 SANTA FE AVENUE
LOS ANGELES, CALIF.

On the left is the new unit added to Oil Well Service Co.'s fleet. Standing in front of the Wilson unit is Jim Sipprelle. Second from the right is Clarence DeWitt.

Long Beach Company Deluxe Oilwell Service

With the thought of emulating the large oil companies' policy of super-service at their service stations, with the latest and best equipment for serving the public, Oil Well Service Co., 2405 Orange Ave., Long Beach, have just taken delivery on the latest thing in new equipment to serve their customers in well pulling and similar service work.

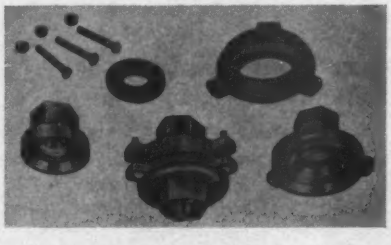
This equipment, recently delivered by H. & B. Sales, Ltd., is a Wilson Double Drum Hoist, powered by 164 horsepower Waukesha Engine, and has the latest type of controls for faster operation and is fully streamlined with a pleasing appearance that attracts the eye of all oil men.

Oil Well Service Co. is operated by Jim Sipprelle and Clarence De Witt. Jim Sipprelle is well known by a great number of oil men due to his management, up until two years ago, of the Atlantic Ave. branch of the Security First National Bank. Clarence De Witt formerly was production superintendent for Sunset Oil Co.

The company now has three production servicing units, all large Wilsons with Waukesha engines powering. They also have a complete line of production tools, boilers, sand lines, cable tools, etc., for any oil well servicing job.

New Swing Joint For Steam Lines

For handling steam pressures up to 100 lbs., a simple and effective swing joint has been developed. The sealing unit is a specially shaped and compounded rubber gasket. This gasket contains a percentage of very finely divided metallic lead, milled directly into the rubber. Because the lead acts as a lubricant, the joint turns freely under pressure. The



gasket is expanded slightly by the heat, which helps to maintain a perfect seal.

By equipping steam lines with a swing joint of this type a flexible connection is maintained by the pipe to actuate movement of mechanism.

The joint is made of heavy bronze, weighs approximately 4½ lbs., and is available only in the ¾-in. straight style. The product is made by Patterson-Ballagh Corp., manufacturers of rubber specialties and equipment requiring the use of rubber.

Further information can be obtained by writing that company at 1900 E. 65th St., Los Angeles, Calif.

●

ERRATUM

In making up the Second Issue, August, the usually sure-handed Oil World expert transposed captions on the pictures appearing on pages 32 and 33. Our apologies to Lane-Wells and to Axelson Manufacturing.

●

W. W. Porter Returns From Philippine Isles

W. W. (Bill) Porter, well known geologist, has just returned to Los Angeles after four months in the Philippine Islands where he made a cursory investigation of oil possibilities. Of interest to California oil men is Mr. Porter's statement that a wildcat is now being rigged up to test a Miocene structure on the Island of Cebu. The trip out was made aboard the Philippine Clipper and the return journey was via Japan on the Asamo Maru.

An additional $30,000,000 will be collected annually from truck operations through the national defense automotive taxes enacted by Congress.

Radioactivity Survey Added By Lane-Wells

Lane-Wells Co., pioneers in the field of gun perforating, has been granted a license under the patents of Well Surveys, Inc. of Tulsa., Oklahoma, to practice radioactivity well surveying. This license is exclusive except for two non-exclusive licenses limited to operations on properties operated by the licensees and a license reserved by Well Surveys, Inc. to continue the practice of radioactivity well surveying. Well Surveys, Inc. will manufacture all detecting and recording instruments used by Lane-Wells.

This new method of well surveying permits the logging of formations through casing, thus overcoming the limitations of present electrical logging which can be performed only in uncased holes.

Lane-Wells is now offering this new logging service in Oklahoma and Kansas and will extend the service to other oil fields as soon as practicable. The results secured by Wells Surveys during the period of developing the new method and apparatus and by Lane-Wells since instituting this new service have clearly demonstrated the effectiveness of this new contribution to the science of finding and producing oil.

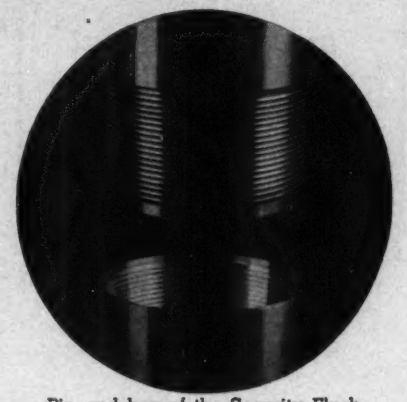
Contrary to erroneous reports published in certain Oklahoma papers, Lane-Wells Company has not taken over either the service or equipment of Well Surveys, Inc., Seismograph Service Corporation, and Engineering Laboratories, Inc. The confusion shown in published reports was probably occasioned by the fact that the owners of Seismograph Service Corporation and Engineering Laboratories, Inc. are also stockholders in Well Surveys, Inc.

New Security Flush Joint Thread

Present facilities of the Security Engineering Co., Inc., Whittier, Calif., will handle steel pipe sizes from 2⅜" O.D. to 7" O.D. in the production of the new Security Flush Joint Thread.

This thread, covered by patents granted to Security in April, is of modified buttress type with the lead of the thread helix cut on a uniformly-tapered surface. A cross-section of the thread form shows a gentle taper on the leasing face and an abrupt taper on the trailing face. When being assembled, the long, tapered surfaces of the pin and box threads meet to form a contact surface similar to that of a tapered plug being fitted into a tapered hole. This reduces to a minimum the chance of cross-threading or stabbing injuries.

Prior to placing the thread on the market, Security had intensive physical tests made by independent laboratories on torsion, tension, compression and bending to determine the thread's efficiency characteristics. The results of these tests have been published in bulletin form. Data compiled from these preliminary and subsequent laboratory tests show that the thread possesses a remarkable degree of efficiency. Continued use in the field has shown gratifying results obtained in the practical application of this new flush joint thread.



Pin and box of the Security Flush Joint Thread.

Among the salient features of the thread design is the inner or secondary shoulder at the bottom of the box, upon which the end of the pin section rests, and an outer shoulder which is beveled at a reverse angle to prevent "belling" if the box should be overstressed during make-up. This bevel, by drawing the threads into closer engagement, forms an additional support at the base of the pin and provides a secondary fluid seal.

In order to maintain a consistently high degree of uniformity and accuracy, a system of rigid inspection and gaging has been put into operation.

All sharp corners of the threads are rounded and smoothed in the milling operation to prevent the formation of metal slivers while the joint is being made up.

The Security Flush Joint Thread requires only a few turns to make-up, and the thread shows a high resistance to wear by repeated make-and-break. Tests in which the thread is made up and broken as much as forty-five times, with a specified applied torque show no change in the condition of the threads.

Wholesale commodity prices in the United States for May 1940, compared with May 1939 and April 1940, has just been released by the U. S. Department of Labor. The index number for petroleum products in May 1940 was 50.7, compared with 78.4 for all commodities.

Even Doodlebuggers Have Their Day

There's a continuing controversy between the scientists and the mystics over the efficacy of divining rods. Scientists say there's no scientific basis for the operation whereby a mystic walks over the terrain with a forked stick, marks where the end bends toward the ground, and declares that below lies water, oil, or whatever is being sought.

Outstanding denunciation of the divining rod as used in the search for oil came in 1864 from Professor Silliman, of Yale, who nine years before correctly had prophesied that oil would be put to many uses.

"The pretentions of diviners are worthless," he wrote. "The art of finding fountains or minerals by a peculiar twig is a cheat upon those who practice it, an offense to reason and common sense, an art abhorrent to the laws of nature, and deserves universal reprobation."

Thomas Brown, Pennsylvania farmer, probably never read or heard of these harsh words of the professor. But he knew all about hazel twigs. He carried his twig around the farm of Thomas Holmden, not far from the Allegheny River. Where it twisted toward the ground Brown drilled for oil. The well began to flow in 1865, one year after Silliman's "expose." In one month it was known as the discovery well of the oil field which created Pithole, first famous oil boom town.

Pyrethrun Picker

Mechanical pyrethum picker, newly developed, may boom domestic production of pyrethrum flowers, toxic ingredient of insecticides. Great secrecy surrounded their early use and preparation as an insecticide in Persia centuries ago.

Chief sources of supply since American insecticide manufacturers began using it in 1860 have been Dalmatia, Japan, and East Africa. American production is small, due mainly to the high cost of hand-picking. The plant has been found to grow well in Pennsylvania, Maryland, and north as far as the Great Lakes and west to the Rocky Mountains.

Today hydrocarbon molecule's atoms are rearranged. If some drop out, something happens. The molecule becomes a liquid, gas, or solid, whichever it wasn't before!

Kick the petroleum molecule around, and out comes a chemical which causes sterility in guinea pigs. A few more kicks and out comes an essential of Vitamin E, which tends to make animals fertile.

Business and Professional Directory

THE
HANCOCK OIL COMPANY
of
CALIFORNIA

PRODUCERS - REFINERS
MARKETERS

GRAYDON OLIVER
PETROLEUM ENGINEER
215 West 7th Street
Los Angeles, Calif. VAndike 3696

MARTIN VAN COUVERING
PETROLEUM ENGINEER
405 South Hill Street
LOS ANGELES
CALIF.
MIchigan 8781

GERARD HENNY, Ph.D.
Consulting Geologist
417 S. Hill St. Los Angeles
VAndike 7053

Read THE
CALIFORNIA OIL WORLD
"The Oil Man's
Journal"
$1.00 a Year

Classified Advertisements

CLASSIFIED ADVERTISING RATES

small type: 50c per line insertion. Count six words to a line. Minimum charge 2.00. All classified advertising payable in advance. Four consecutive insertions at price of three, if copy does not change.

24 times .....$ 7.50 per inch
1 time ..... 10.00 per inch

Not responsible for more than one incorrect insertion.

MAPS

Large maps of Los Angeles Basin oil fields and map showing all California oil fields. Price $15.00 each on paper and $20 each on cloth. Individual state oil and gas maps of Mid-Continent and Rocky Mountain regions. Maps show geological cross sections at base. These maps indicate wells drilling, wells producing and abandoned, with depths.
All maps revised up to date of purchase.
JAMES C. BRANSFORD
1127 Story Bldg.
Los Angeles, Calif.
Phone: TUcker 7530

Oil Men's Calendar

Calif. Natural Gasoline Association. **Los Angeles Chapter**—Meets 1st Thursday Each Month, Barker Bros. Bldg., Los Angeles—Dinner at 6:00 (Optional). **Taft Chapter**—Meets Third Thursday Each Month.

American Society of Mechanical Engineers—Los Angeles Section—Meets 2nd Thursday Each Month—Barker Bros. Bldg., Los Angeles. Dinner at 6:30 (Optional).

September

24-25—Society of Automotive Engineers, National Tractor Meeting, Schroeder Hotel, Milwaukee, Wis.

30-Oct. 1—National Lubricating Grease Institute, Annual Convention, Stevens Hotel, Chicago, Ill.

October

3-5—North American Gasoline Tax Conference, Whitley Hotel, Montgomery, Ala.

7-10—American Gas Association, Atlantic City, N. J.

7-11—National Safety Congress and Exposition, Stevens Hotel, Chicago, Ill.

12 — Automobile Manufacturers Assn., 1940 Auto Show, New York.

14—Society of Automotive Engineers, Annual Dinner, Hotel Commodore, New York.

15—National Stripper Well Association, Dallas, Texas.

16-18—Independent Petroleum Assn. of America, 11th Annual Meeting, Dallas, Tex.

17-18—American Institute of Mining and Metallurgical Engineers, Petroleum Division, **Los Angeles, Calif.**

24-26—American Institute of Mining and Metallurgical Engineers, Petroleum Division, Tulsa, Okla.

31-Nov. 2—Society of Automotive Engineers, National Aircraft Production Meeting (and Engineering Display), Biltmore Hotel, **Los Angeles, Calif.**

November

1—California Natural Gasoline Assn., **Los Angeles, Calif.**

7-8—American Association of Petroleum Geologists, Pacific Section, **Los Angeles.**

11-15—American Petroleum Institute 21st Annual Meeting, Stevens Hotel Chicago, Ill.

December

2-6—American Institute of Chemical Engineers, New Orleans, La.

9-14 — National Asphalt Conference, Dallas, Texas.

1941

January

6-10—Society of Automotive Engineers, Annual Meeting (and Engineering Display), Book-Cadillac Hotel, Detroit, Mich.

California Crude Oil Production

Two Weeks Ended August 31, 1940

	August Daily Quota	Average Daily Production	Excess
San Joaquin Valley			
Belridge—North	11,124	10,561	*563
Belridge—South	2,126	2,078	*48
Buena Vista	15,789	15,710	*79
Canal	5,543	5,518	*25
Coalinga-E. (Eocene)	18,662	19,196	534
Coalinga—East-West	14,690	10,183	*4,507
Cole's Levee	6,909	7,597	688
Edison	2,234	2,390	156
Elk Hills	6,803	12,150	5,347
Fruitvale	5,639	5,493	*146
Greeley	4,601	4,744	143
Kern Front	7,051	5,828	*1,223
Kern River	6,860	4,023	*2,837
Kettleman No. Dome	33,252	47,045	13,793
Lost Hills	3,890	3,539	*351
McKittrick	3,870	3,649	*221
Midway	36,074	29,549	*6,525
Mount Poso	8,980	8,950	*30
Mountain View	6,987	7,522	535
Rio Bravo	9,128	9,216	88
Round Mt. and Coffee Canyon	6,980	7,260	280
Ten Section	9,967	9,886	*81
Wasco	1,633	1,583	*50
Other Fields	4,042	3,740	*302
TOTAL	232,834	237,410	4,576
Coastal Counties			
Elwood	3,313	3,441	128
Rincon	2,755	4,693	1,938
Santa Maria	5,820	3,889	*1,931
Gato Ridge	2,108	6,547	4,439
Santa Maria Valley	16,079	17,189	1,110
Santa Paula-Newhall	6,001	6,376	375
Ventura Avenue	32,150	34,382	2,232
Other Fields	5,256	5,591	335
TOTAL	73,482	82,108	8,626
Los Angeles Basin			
Alamitos-Seal Beach	6,884	7,016	132
Brea-Olinda	7,914	5,947	*1,967
Coyote—East	3,856	3,659	*197
Coyote—West	9,385	8,376	*1,009
Domingues	17,661	22,220	4,559
El Segundo	2,010	2,167	157
Huntington Beach—New and Old	21,987	25,100	3,113
Inglewood	11,644	11,470	*174
Long Beach	37,830	42,603	4,773
Montebello	5,633	4,116	*1,517
Montebello-West End	17,131	14,124	*3,007
Playa del Rey	3,869	3,954	85
Richfield	6,833	8,455	1,622
Rosecrans-Athens	8,317	11,908	3,591
Santa Fe Springs	23,166	26,014	2,848
Torrance	5,126	4,972	*154
Torrance "34" and "D & B"	5,597	5,607	10
Wilmington	77,756	84,260	6,504
Other Fields	4,505	4,382	*123
TOTAL	277,104	295,350	19,246
STATE TOTAL	583,420	615,868	32,448

*—Shortage.